

MACDONALD COLLEGE JOURNAL



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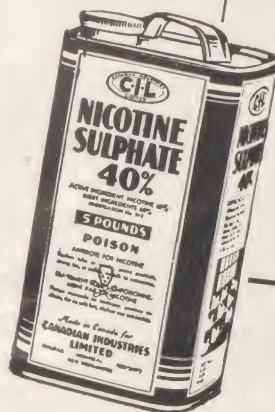
If you should need cash, you can BORROW from the Bank, using your Victory Bonds as security.

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Rehabilitation of Agriculture

The leader of the C.C.F. party recently announced "the rehabilitation of agriculture" as a plank in the platform of the party. This makes it unanimous. All leaders of the major parties in the House of Commons have now agreed that agriculture must be rehabilitated. There the agreement ceases. There is no unanimity of opinion as to the methods to be applied to reach this desired end. Hence we must infer that there is no agreement as to just what is wrong with the industry. It is only from a study of the remedies suggested that we may secure any clue as to what this is considered to be.

Two proposals have already been recommended. One is the application of the Prairie Farm Rehabilitation policy to the whole country. The other is the extension of rural electrification. The Prairie Farm Rehabilitation policy, as carried on in pre-war years, was in part an admission that farmers may have been located in impossible places. The plan to make this scheme applicable to all Canada, rather than restricting it only to the Prairies, appears to be an admission that farmers elsewhere may have settled in impossible locations.

The plan to expand rural electrification may be an admission that there is as much need for this in sparsely settled as in more densely populated areas. It also is more expensive to secure in the sparsely settled areas. Admission of these two principles offers ample opportunity for wider application.

The principle here involved is open to criticism. It is an admission that farming is unable to stand on its own feet as an industry. Therefore it must be rehabilitated by public assistance. There is another method of treatment. Why not find out first just *why* farming needs rehabilitation? When some agreement is reached on this point we can then proceed to treat the fundamental problem. Were this method followed we venture to assert that the need for rehabilitation might not exist. A "fair field and no favours" has been a familiar request of the farming industry. Assured of this the initiative, skill and industry of those in the business of farming will be maintained and encouraged. Assistance is a questionable cure for injustice to any group. A fair field and no favours is in the long run the only policy that is in the interests of society in general.

Doubtless other clues to the ideas of our leading political groups will be revealed as their policies take shape. It is significant, however, that none of these proposals are the work of "farmer parties", but mainly that of groups which in the past have been largely representative of urban interests. Again, it appears that some of those responsible for these proposals have not sought to determine what farmers themselves think is

wrong with the industry, nor to have undertaken any profound enquiry to find out why the industry needs rehabilitating.

All this again emphasizes that it is the interest and responsibility of the farm people themselves to continue to develop a close-knit organization for the careful study and preparation of their own case. This study and preparation is necessary in order to enable the presentation, to the proper authorities of the farmers views, free from political or other bias.

Farm Finance

Perhaps the most noteworthy feature about our farmers during the present war period has been their conservatism in the handling of their finances. There have been relatively prosperous times in some areas and in some years. This opportunity to make money has, in the past, resulted in extensive borrowing from banks, loan companies and private money lenders. Such a step seemed justified at the time but when the slack came or when surpluses forced prices down farmers were saddled with large mortgages and high interest rates. This practice proved disastrous to many since the last war. In fact it assumed such proportions among the farming class that debt adjustment legislation with its many-sided problems came into effect.

During the period of the present war, farm indebtedness has gradually been reduced. This is as it should be. At times there has appeared to be some tendency toward semi-speculation in some lines and in some areas but for the most part this business has been of the "cash and carry" kind. This "cash on delivery" policy has helped to control the tendency for prices to rise and get out of control. We are, therefore, moving along on a sound basis by increasing our output and reducing our indebtedness.

At the present time there appears to be much concern on the part of our Governments about the difficulties of the small farmer in borrowing money and the interest rates he has to pay for it. This would have been more valuable had it received consideration when agricultural prices were less favorable. It is justified now in supporting young farmers in establishing themselves on the land; in making farm machinery payments more reasonable; in encouraging long-needed improvements, and in perhaps some other particulars. It should not become the prelude to a period of easy and wasteful speculation and spending. This borrowed money should be wisely invested. A growing farm indebtedness accompanied by inflationary values is always followed by deflation and hardship to many.

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"Hard-Facing" Tillage Implements

by J. H. Cooper

Most farmers will keep a sharp cutting edge on hand tools, such as an axe or hoe, because they know from experience that more work can easily be done with a sharp tool than with a dull one, but sharpening the cutting edges of tillage implements is not generally done. When one considers that approximately half the power required to plow is used in cutting the furrow slice loose, one gets some idea of the saving in power, fuel and wear-and-tear on the tractor and plow which could be made if the cutting edges of plowshares would retain their original sharpness and cutting ability. This can be done by "hard-facing", which is a process of welding, or overlaying, on the metal surface, a facing of metallic compounds, which forms a new surface which is extremely hard and resistant to wear.

Hard-facing was developed primarily for use in the oil fields to prolong the useful life of drill bits, but since then it has spread to include many industrial and agriculture uses. In Canada, industrial applications are many, indicating the basic soundness of the practice, but agriculture has been slow to take advantage of this material and power saver.

Last autumn the Department of Agriculture Engineering at Macdonald College conducted preliminary tests on plowshares which had been hard-faced with wear-resistant metal. Untreated steel shares were so badly worn after ten hours' use that they had to be removed for drawing out and sharpening. One of these worn sets of plowshares was "hard-faced" along the cutting edges and at those points where maximum abrasion took place.

How it is done

The treatment consists of coating the top, bottom and landside of the share's point, and also a strip one and one quarter inches wide along the bottom of the share throat. Surfaces must first be ground to be a bright finish on an emery wheel to remove all oxide or dirt. An oxy-acetylene welding torch is used to apply the hard-facing metal. The welding technique is similar to that of brazing and any welder who is proficient in the use of the welding torch can soon master it. Details as to the exact method of application are available from any welding firm. After completion of the welding, the share point is ground until it is similar in shape to the point of the new share and the top side is sharpened by beveling $3/16$ of an inch back from the edge.

Results of hard facing

Shares thus treated were replaced on the plow, with the result that their length of life was increased approximately five times that of the untreated shares. This effects a considerable saving both in time for forging shares and maintenance or repair expense. When the hard-facing metal has worn back, another application can be made at approximately one-half the cost of the first. When this practice



This hard-faced share plowed 550 acres of dry, hard land without being removed from the plow. Ordinary steel shares had to be sharpened every 20 acres and after five sharpenings were thrown away.

is followed it is essential that the second application be made before forging of the share is necessary. As unprotected shares are forged about five times before they are discarded, this indicates on an average that about five hard-facing treatments may be given in the useful life, thus extending the total length of use of a hard faced share twenty-five times that of an untreated one.

Protecting the plowshare at the points where wear is most rapid not only saves shares but also gives "new plow" operation over a much longer period. It maintains a self-sharpening edge that cuts the furrow slice loose with the least amount of power. The reason why the protecting metal is placed only on the bottom of the share throat is that, as the soil moves over, wearing away the softer steel of the upper side of the share itself, it leaves the thin layer of hard-facing metal projecting below, thus maintaining a knife-like edge.

Another important factor is the maintenance of the proper amount of down suction or "suck". This down suction is what makes the plow enter the soil and holds it at the desired depth. Natural wear of unprotected share points is usually such that wear is most rapid underneath the point which gives a "sleigh-runner" effect to the point itself. The result is that the plow will tend to "ride out" and will not plow to depth in a hard soil. By protecting all the surfaces of the point this wear is prevented and the original shape is preserved, as long as the hard-facing metal is present.

Previously plow manufacturers have recommended the use of chilled iron shares for plowing in sandy or gritty soils where steel shares wear quickly. Unfortunately, chilled shares are brittle and have a tendency to snap off when they hit a rock or other obstruction in the ground. This is especially true on tractor plow. *No attempt should be made to hard-face cast iron or chilled shares.*

We Can Do Better...

IN the past, wars have brought with them a high cost of living, ending with inflation.

This sapped the strength of nations and added poverty and injustice to the other tragedies of war.

Later it has led to falling prices and unemployment.

In this war, we Canadians are determined to head off this danger.

We have done much to avoid a repetition of the disastrous price rises of previous wars.

We have paid higher taxes. We have bought Victory Bonds. We have severely limited profits.

We have put a ceiling on prices. And to make it possible to hold the ceiling, wages and salaries have been controlled.

In one way or another most increased costs have been absorbed and very few passed on to the consumer.

Holding the ceiling has been a struggle. But the results have been worth while. From 1914 to 1919 prices rose 60%. From 1939 to 1944 the rise has been only 18%.

This effort of the Canadian people has been successful enough to be noted in other countries.

But we must continue to hold the line. We need not let history repeat itself. We can do better.

We can all help —

By cutting down unnecessary spending, and buying Victory Bonds instead.

By not hoarding or buying in black markets.

By not taking advantage of the war situation to press claims for higher prices, higher wages, higher rents, or higher profits.

(This advertisement is one of a series being issued by the Government of Canada to emphasize the importance of preventing a further increase in the cost of living now and deflation later.)



Animals Render Service

by A. R. Ness

Department of Animal Husbandry.

Unlike many different kinds of classroom material, farm animals cannot be kept in showcases behind locked doors to be taken out whenever needed. Whether they are used for teaching purposes or as material for experimentation, the animals should be available in a relatively normal functioning state. On the average farm, of course, the chief purpose of the animals is to transform the products of the soil into human food and in so doing provide revenue for the owner. This is not necessarily the primary purpose for which flocks and herds are maintained at Macdonald College.

It is a costly undertaking to maintain a number of herds and flocks as normal functioning units. As such, however, they provide adequate teaching material and as such also they provide through the revenue they produce most, if not all, of the cost of operation. In the field of experimentation and research costs run very high while the revenue can quite conceivably be nil, depending upon the nature of the problems being investigated.

To deal with only one class of farm animal at this particular time, let us consider the uses made of the cattle herds at Macdonald College. The beef herd, for example, is used like the other animals for teaching purposes but the herd was established and is maintained by funds provided by the Department of Agriculture of the Province of Quebec for the express purpose of studying the possibility of the production of baby beef under conditions existing in the Province of Quebec. A herd of 20 breeding cows and a herd sire was established in 1939. The calves are marketed each year at approximately 12 months of age as finished animals called baby beef. This practice causes the number on hand to fluctuate from time to time during the year. There are, however, on hand at the present time 40 head of beef animals on which accurate feed and gain records are being kept.

The dairy herd of much longer standing and numbering over 140 head of all ages, serves a number of interesting and useful purposes as well as valuable teaching material. The animals are practically all pure bred and registered and all milking cows have been on test for milk and butterfat for many generations. In the year 1943, 497,649 pounds of milk were produced. The accumulation of records of producing ability when analyzed unfold the worthiness and value of certain individuals and families. This information makes possible the application of breeding principles with which to continue breeding operations and not the least provides excellent illustrative data for student use. The annual milk and butterfat producing ability of daughters as compared to that of their dams provides a very telling story, while even more important is the information made possible by daughter-dam comparisons of groups of daughters of the different herd sires.

Herd type classification has been adopted by practically all of the breed associations in Canada within recent years. The Macdonald College dairy herd has on a number of occasions been used as a trial herd by the officials in order to establish uniform standards for Excellent, Very Good, Good Plus, Good, Fair, and Poor types, and to get the scheme of type classification started upon an equitable and sound basis.

Very few of the milking cows in the herd have not served in one or more feeding tests or trials involving different feeds or feed combinations. There is probably no more exacting undertaking than to set up a comparative feeding trial where the results are to be measured in terms of milk and butterfat. Such factors as age, stage of lactation, daily milk production, percentage of fat in the milk, freedom from any abnormality or disease, and size of animal must all be carefully balanced in order to obtain a true comparative measure of different diets. The younger members of the herd also play their part in nutritional trials.

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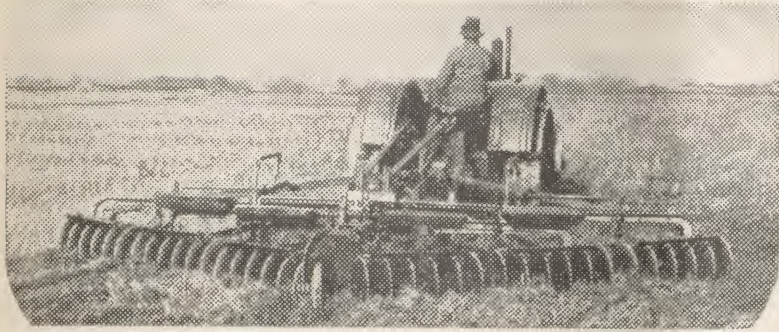


Macdonald Dimple 3rd, an Ayrshire on Type Classification, rated Excellent. Photo taken at seven years of age.



Macdonald Millie Posch, a Holstein on Type Classification, rated excellent. Photo taken at six years of age.

*Get All THE VALUE OUT
OF YOUR RATION PERMIT.*



**FOR BETTER TILLAGE
—a saving in TIME and LABOUR!**

To give your land a better break . . . to be sure of fast, efficient soil preparation . . . you need a husky Cockshutt Harrow that will stand the gaff, provide uniform penetration, deep or shallow, and operate smoothly and easily. Cockshutt Harrows are noted for their strong construction features; their light draft; their tough, heat-treated, extra-durable discs. Cockshutt discs have the dish or curvature for most efficient work and *they hold their cutting edge!*

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"TOGETHER WE SERVE"

"A Picture Every
Farm Family Will
Want To See"

**WATCH FOR IT!
ASK YOUR LOCAL COCKSHUTT
DEALER TO LET YOU KNOW
WHEN "TOGETHER WE SERVE"
WILL BE SHOWN LOCALLY!**

**Choose a
COCKSHUTT
HARROW**



IMPORTANT

Sale of farm implements is still limited by Government rationing. If you can keep your present equipment in operation by prompt repairs and replacement of Genuine Cockshutt parts, by all means do so. If, however, your need is urgent, make an application, through your Authorized Cockshutt Dealer, for a permit to buy. Use the services of your Authorized Cockshutt Dealer for either repairs or new machines, he is ready to serve you in every way possible.

• • •

A TYPE AND SIZE FOR EVERY FARM

Ask your Authorized Cockshutt Dealer to give you the full details on Cockshutt Harrows in the 1944 line-up. Then you can choose the type and size to best suit your needs . . . and your work. In addition to Disc Harrows the line includes Cockshutt's very popular spring-tooth and spike-tooth Drag Harrows. If a Harrow replacement is necessary . . . you'll do better with a Cockshutt Harrow!

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REGINA

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SASKATOON

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Cooperative or Custom Help

by L. G. Heimpel

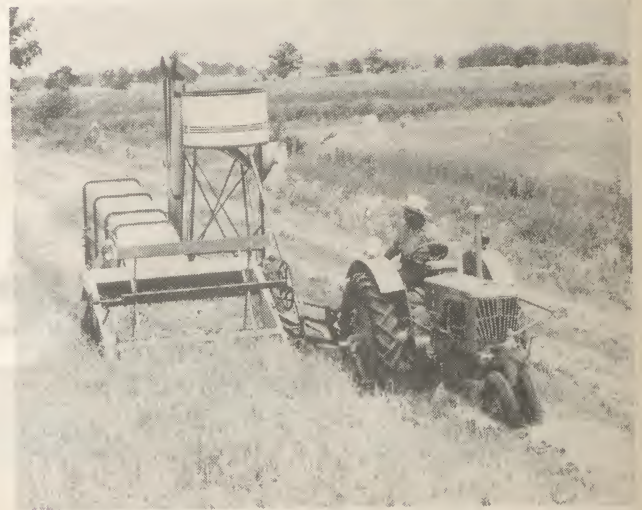
With the farm help situation becoming more acute, more and more farmers are wondering whether there is not some way in which the big jobs of the farm year cannot be "farmed out". For instance, a dairy farmer has 30 acres of land to seed to grain this spring. He is short of help and dependent on horse power. If there is a neighbor with a tractor who will undertake to prepare his seed bed, this is probably the way it will be done. Harvesting of grain is another job which is being slowly changed from a binder, stooking, hauling and threshing job to a one-operation machine job with the combine harvester.

Then, there is fall plowing which many farmers would like to have done by outside help, if available, this year; also, perhaps a field or two which should be after-harvest cultivated to control weed infestation, or it may be desirable to summer fallow a field for the same reason. All these are jobs which can be done much more quickly by the latest power equipment than is possible with equipment now available on most small farms. If farmers with up to 75 or 80 acres of crop land could, this year, get these big bulk jobs of field work done by some form of custom, cooperative or community outfit it would be a Godsend.

Much custom or community work is already going on in farming districts where shortage of help is most acute. Such work is not of the nature of large scale "custom service" however. It consists mainly of one farmer with a tractor, plow and a tractor disc harrow or cultivator, doing a few fields of tillage work for a few neighbors. We know of a few cases where Diesel tractors and large capacity machinery have been acquired by individuals to do such work. Usually such custom service was started by a farmer for a few of his neighbors after he discovered that there was a demand for this sort of thing in his particular community. We know of one instance in which such a farmer is now using a Diesel track type tractor with a 3-furrow plow, to which a fourth furrow can be added if desired, a one-way disc, a large capacity stiff tooth cultivator, threshing equipment, silo filling and wood-sawing machinery. Recently this man added a second tractor on rubber to his equipment for custom work, and a 6-foot combine harvester. He has all the work he can do and people are well pleased with his service, both as to quality of work and the charges for the work.

Community Machinery Use not New

There has always been some community use of some kinds of farm equipment in practically all rural areas. In the writer's experience in Western Ontario, only about one farmer out of four or five in a community owned a turnip seeder. The machine was loaned out by the owner and a small charge made for its use. Similarly, a potato



Heavy machinery like this one-man combine can profitably be owned co-operatively.

plow, which is an improvement on the ordinary plow for digging potatoes, was available on the same basis from another farmer. Later, a man in the same district decided to specialize in potato growing and bought a digger, which was borrowed by some neighbors for their own smaller patches. Wire fence stretchers, wood-sawing machines, corn binders and grain binders are available under similar conditions in many communities, borrowers of such equipment being only too glad to pay a rental charge for their use.

However, there is a definite point where the rental basis under which machinery can be borrowed stops, and where the owner insists on operating his own machine when it is doing work for others. That point is reached when the owner does not care to entrust to a neighbor the operation of a machine which is more intricate and expensive than the more simple machines mentioned above. Indeed, with such machines the borrower does not want to take the responsibility of operating the machine for fear of breakage. The corn binder is a good example of this, and in many sections, the owner operates the machine when cutting for neighbors, using the neighbors' horses to drive the machine.

There is a very good reason for this attitude in connection with community use of intricate machinery, and it is an important factor where cooperative machinery is being considered. Such machinery as tractors, tractor plows and big scale tillage machinery, binders, combine harvesters must be well understood by the operator and cannot safely be entrusted to men who have not had considerable experience or adequate instruction in their use.

It is true that some small scale cooperative ownership of tractors and the machinery that goes with them has been successfully practised by a few farmers, but in most cases, only members of the same family were involved.

Co-op. Ownership Must Be Supervised

Where more than two or three members are to be included in a cooperatively owned machinery organization, it is absolutely necessary that a constitution be drawn up and that it be understood by all members. Officers of an executive committee must be elected and their duties made clear; regular meetings must be provided for, and such questions as the housing of the equipment, the order in which work will be done from year to year for different members, the charges for different kinds of work and the method of settling for work done and for repairing and overhauling the equipment at the end for the year, must be agreed on and lived up to. More than one community machinery cooperative has gone on the rocks on one or more of the above points. Another and possibly the most important factor for the success of this kind of cooperatives is the provision that care of all equipment and its operation must always be accepted by one man and one man only. This man must be one who not only understands the machinery he operates, but who is definitely mechanically inclined and has had training which fits him for this work.

To be most effective in the accomplishment of a large quantity of work in the shortest possible time, and to do such work with a maximum of economy, a larger power outfit than is usually found on individual farms is advisable. This involves a Diesel engine, because the savings in fuel costs alone are such with this type of machine that its advantage should not be neglected. A tractor for this type of work, together with the necessary tillage and harvesting machinery would certainly run into an investment of from \$4,000.00 to \$5,000.00. For this reason it is probably not likely to be undertaken lightly by small groups of farmers on a cooperative basis.

Custom Work Most Promising

It would seem, therefore, that the best way of providing the advantages of large scale machinery for the small farmer would be through the medium of custom service. The owner of such equipment may be a farmer or he may be a man who undertakes to make his living entirely through custom work for a particular community. It is unfortunate that efforts were not made earlier in this war by our Provincial Governments to encourage this form of machinery service, because much good could have been accomplished in overcoming the effects of labour shortage and in increased food production had such services been instituted earlier in the war. It may not be too late, even now, for the promotion of this kind of enterprise. Also, after the war, there should be a large field for custom operated farm tillage and harvesting services. Many returned soldiers with rural backgrounds have had considerable mechanical training in their war experience. Some of these men may wish to farm on their own, but others who have no such inclination must find some means of obtaining a livelihood when the war is over. With some specialized

(Continued on page 26)



**"HE WON'T SCARE AWAY
RUST & ROT"**

Your farm property is too valuable to you and to your country at war to leave it to the tender mercies of wind, weather, frost and Father Time. It needs the protection of the best quality paint. And, in these days of wartime conservation of materials, every gallon of paint must give you the utmost in coverage, hiding power and long life protection. That means using Sherwin-Williams Paints, for your farm buildings, house, implements and fences. Inside the house, too, you'll need Sherwin-Williams because they beautify as well as protect; ask your Sherwin-Williams Dealer to lend you his illustrated Paint & Colour Style Guide — it's chock full of good ideas on decoration.



Consult your local Sherwin-Williams Dealer



Cultivating and Weeding the Victory Garden

by H. R. Murray

A victory gardener's version of "a stitch in time saves nine" is "a hoe in time saves the garden." The gardener who does not deal with the weed situation while the weeds are quite small and before their roots have become firmly established, soon finds that weed control is likely to become quite a problem.

Not only are weeds killed more easily when they are small, but there is less chance of their having injured the crop if they are destroyed in the early stages of growth. Weeds draw heavily on soil moisture and plant foods, especially nitrate. Also, they interfere with the proper light relations of our crop plants, in much the same way as a thick stand of plants will interfere with the normal development of the individual plants. Crowding always results in weak and spindling plants.

The most efficient implement for the destruction of weeds is the hoe. Many other cultivators are recommended and no doubt will be used quite generally, but if the victory gardener will use his hoe conscientiously and efficiently (either type — Dutch hoe or drawhoe) he need not worry about any other type of cultivator or method of cultivation.

Hoeing destroys the weeds by cutting them off just below the surface of the soil, leaving them on the surface to die. Also, during hoeing the surface of the soil is stirred to form a mulch thus disturbing and perhaps destroying many weed seeds which might be germinating.

How Often Should We Hoe Or Cultivate?

Quite often a recommendation is made to cultivate or hoe the garden twice a week. However, there is no justification for such a recommendation. Cultivating and hoeing should be done only as the weed and grass situation justifies. The gardener, of course, should not go to the other extreme and forget entirely about cultivation. Too many gardens are abandoned to weeds when the weather became warm, for it is much more pleasant to sit in the shade and try to keep cool than to labour with a hoe in the hot sun.

Weed control is the prime object of all cultivation and hoeing. First of all, therefore, there should be enough weeds to justify cultivation; secondly, the cultivation should be done before the weeds have become established. The best time to cultivate is when the very small weeds are breaking through the surface of the soil. If cultivation can take place while the soil is soft, such as after a fairly recent rain, so much the better.

There are several advantages in doing weed control work at this time. First, the weeds are easily destroyed by shallow cultivation with no injury to the feeding roots of the crop plants which are just below the surface of the soil. This is a very important point and should be kept in mind

always by victory gardeners. The immediate surface soil is the richest soil, so do not prevent the plants from utilizing this fertility by destroying the feeding roots through deep or heavy cultivation.

Another advantage of cultivation at the proper time is the early formation of a soil mulch which may assist in the conservation of soil moisture, if the roots of the plants have not migrated to the centre of the row. There is also another advantage and that is in the rough and uneven surface which follows cultivation; this is of considerable help in holding water on rolling or sloping land during heavy rains. In short, if sufficient cultivation is given to keep the weeds under control, and if it is given at the right time, it will be enough to accomplish all other purposes.

So, victory gardeners, combat vigorously all attacks of weeds by cultivating and hoeing at the best time for their destruction. Be prompt, efficient and persevering — for weeds are the most insidious of all pests. They may not look very formidable especially if the weather is hot — but they are getting in their nefarious work nevertheless. They are establishing themselves insidiously among the plants, crowding and robbing them of their much needed light, moisture, air and plant food — especially nitrates. At the same time they are attacking the morale of all victory gardens. Weeds are indeed our arch enemy!

Hoeing Is An Art

Before using a hoe of any kind, first make certain that it is sharp. If your hoe is not sharp, remove all soil from it and sharpen the cutting edge with a file.

If you are using a drawhoe, commence hoeing at the end of the row by placing the cutting edge of the hoe on the ground about eight to ten inches from the end of the row. Draw the hoe toward you at the same time exerting a downward pressure with the hands, arms and shoulders, on the handle, so that the cutting edge will slide through the soil about $\frac{1}{4}$ inch below the surface. The harder the soil the greater will be the pressure required to keep the edge of the hoe below the surface. Walking forward, work across the row between the plants, then step forward and repeat the procedure.

Keep the strokes reasonably short and be careful not to drag the soil toward you and not to cover up the weeds which have just been cut off. If you are having difficulty in this respect try a cutting motion which slips to the side.

It is much simpler to use a Dutch or push hoe. As with the drawhoe, commence at the end of the row. Taking reasonably short or small cuts, push the hoe from you, at the same time keeping it at the same depth as recommended for the drawhoe. Work across the row and between the plants, moving backwards. Repeat the process, being care-

ful to cover all of the ground. Although it requires less experience to become proficient with the Dutch hoe, this hoe is much harder to handle in stony or sod land than the drawhoe. If it is not kept under complete control it will slip out of the ground and cut off the plants.

No matter which hoe you choose, work as close to the plants as possible. As soon as the weeds in the rows of vegetables (where they could not be touched with the hoe) are large enough to grasp they should by systematical-ly removed by hand.

Thinning

Thinning is an important operation in the growing of many vegetables crops. It is the process of reducing the number of plants in a row or hill, so that the remaining plants may develop normally and not be spindling or malformed. Liberal sowings of seed and the subsequent thinning of plants will assure the victory gardener of practically a perfect stand, which is necessary for a maximum yield. However, this operation of removing small seedling plants until the remainder are spaced at the recommended distance apart for the best development is a tedious task as well as a waste of time and good seed.

This fact is appreciated by experienced gardeners who realize that a considerable amount of thinning may be avoided in the growing of many vegetables by the correct distribution of good seed. This is always a tendency for the beginner, however, to sow his seeds too thickly, hence making it necessary for him to thin all of his crops, if they are to be a success. The victory gardener should remember that sowing seeds too thickly and then not thinning promptly are errors which are responsible for many crop failures.

Nevertheless, there are some crops such as lettuce, spinach, endive — and quite often sweet corn and radishes — which must be thinned regardless of who is growing them, because the spacings between the plants must be wide enough to allow for the rapid development of a relatively large plant.

To obtain the best radishes they should be thinned to stand about one plant to the inch and never more than two plants to the inch. A thicker stand will result in misshapen specimen, and, if they are very thick, the radish roots will even fail to develop. Thinning should start early — just before the first true leaf is formed.

In the thinning of lettuce we must take into consideration the different types. Leaf lettuce is thinned, at first, to four inches between plants. When the plants start to crowd, begin to remove every second plant for use on the table. This leaves a space of eight inches for the remaining plants to make their best development. The butterhead type of lettuce, such as Big Boston or Unrivalled, is thinned usually to a plant to every eight to ten inches and the crisp heads to a plant every 12 to 14 inches. Begin thinning just as soon as the plants are from $\frac{1}{2}$ to $\frac{3}{4}$ inch tall.

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A School Lunch Project at Macdonald High School

by F. Isabel Honey

The importance of nutritious lunches for children at school is almost universally recognized. Even if it is impossible to serve a complete meal at noon, a school lunch program is still worthwhile. The planning of individual lunch programs presents specific problems which must, of necessity, be adapted to local conditions. It may be that only one dish can be prepared at school to supplement the "carried lunch". It is desirable to have some cooking equipment so that something hot such as a main dish, soup or cocoa, may be served at least during the winter months. The proportion of students who have vacuum bottles thus obviating this need (to a degree) is much too small.

The Macdonald High School has carried out the practice of serving soup or cocoa during the winter months for some years. The lunch room in which the students eat contains four long tables with benches at which the students sit. There is a small electric stove with an oven; a sink and dish cupboards. This year the High School students have been taking the responsibility of preparing a hot dish which might be cocoa, soup, baked potatoes or hot dogs. The principal, Mr. Davies, required the menus a week in advance so that the parents could be notified what was to be served. In this way a suitable "carried lunch" could be planned.

Platoon I. Macdonald College Department, Canadian Red Cross Corps, carried out a food emergency project in the High School from February 14th to February 25th. The four girls of the Fourth Year, School of Household Science, taking the teacher option, organized the program under supervision. This was carried out along with their regular class work and was only possible because of the work done by the other Platoon members.

The student teachers planned the menus and submitted them to me for approval. These menus showed what they expected to serve and gave suggestions for the "carried lunch". After approval, copies of the menus were sent to Mr. Davies. The four girls having planned the menus together then divided themselves into two groups, each group being responsible for the work for one week. They then made out their market orders and work schedules and divided the Platoon members so that they had two helpers each day. If the dishes planned involved preparation the night before, the two in charge and the two helpers came in and did this. Night preparation was more often the rule than not and varied in time from about a minimum of one hour to a maximum of one hour and a half. Cocoa paste was always made up so that on the day of serving only milk need to be added. All cocoa was made four-fifths milk.

MENUS

SUGGESTIONS FOR THE "CARRIED LUNCH"

Week of February 14th, 1944	
Monday — Cream of Tomato Soup; Applesauce with Marshmallows.	Heavy sandwich (egg, meat, etc.) celery curls or carrot stick or lettuce; cake or cookies, milk.
Tuesday — Vegetable Casserole; Cocoa	Sandwiches as above; apple or orange; cake or cookies.
Wednesday — Chop Suey (contains meat); Cocoa	Bread and butter; celery curls or carrot sticks or lettuce; fruit, cake or cookies.
Thursday — Shepherd's Pie; Hot spiced tomato juice	Bread and butter; celery curls or carrot sticks or lettuce; fruit, cake or cookies and milk.
Friday — Boston Baked Beans; Cocoa	Bread and butter; celery curls or carrot sticks or lettuce; fruit, cake or cookies.

Week of February 21st.

Monday — Scrambled Eggs; Cocoa	Rolls or bread and butter; celery, etc.; fruit; cake or cookies.
Tuesday — Creamed Salmon; Cold spiced tomato juice	Rolls or bread and butter; celery, etc.; fruit; cake or cookies, and milk.
Wednesday — Beef Stew; Cocoa	Rolls or bread and butter; celery, etc.; fruit; cake or cookies.
Thursday — Scalloped Corn with Bacon; Cocoa	Rolls or bread and butter; celery, etc.; fruit; cake or cookies.
Friday — Vegetable Soup; Baked Custard with Caramel Sauce.	Heavy sandwich such as egg or meat; celery, etc.; fruit; cake or cookies.

(Note—Milk was delivered at the school and could be ordered by any student.)

Dishes prepared the night before were made, for convenience, in the College laboratories but could easily have been done at the High School if a few more utensils had been available such as a Dutch oven or heavy steel kettle and bean pots. The food when prepared was transferred to the two broiling pans which fitted the oven of the school stove. These had two inch rims and when filled each contained enough to serve about twenty. In this way the food could easily be heated up and kept hot for



School of Household Science.

serving. The scrambled eggs were very satisfactorily prepared over boiling water in a double boiler holding one gallon.

The children paid five cents for each dish. The average number served each day was thirty-eight and most of these bought both dishes. The smallest number served any one dish was twenty-three. This was on Thursday, February 17th, when only twenty-three ordered the hot spiced tomato juice. On that same day thirty-eight took the shepherd's pie. It was interesting to note in this regard that when cold spiced tomato juice was served the count went up to thirty. The largest number served was forty-three. This was the count for two dishes, chop suey and scalloped corn with bacon. Beans and stew ran a close second with a count of thirty-nine and thirty-seven respectively. In this project no dish was served twice and it would be interesting to see the count on a repeat performance. In this regard I would like to point out to the parents reading this article that too often the food dislikes of a child are acquired from the parents. Children are great mimics, particularly of those whom they regard as perfect and what you do they will want to do. Therefore you can not afford to have food dislikes. From this digression let us return to the point in question, that of cost.

The dishes varied in cost per person from about three cents to over eight cents, the most expensive being the creamed salmon and the least expensive the cocoa, even though it was four-fifths milk.

Contrary to the impression given by the picture the amount of help required was not excessive. Generally, only two girls stayed for the serving. The four girls carried the food to the High School at eleven a.m. and started it heating, and then got out the dishes and put the oilcloth coverings on the table. Two then stayed to watch the food and do the serving at 12.00 while the other two went to have their lunch. These last two then came back at 12.30 to wash the dishes, wipe off the tables, put away the covers and sweep the floor and see that all was immaculate. The serving was not easy as the room was very crowded and not all took the hot dishes. In this respect the two High School girls who had had the responsibility of the lunches previous to this time gave us invaluable aid as they helped serve. They had the lists of those eatings and knew the students.

Although it was a short experiment there was a good deal of enthusiasm aroused on the part of students and teachers and the cooperation from the homes in regard to the suggestions for the "carried lunch" was excellent. Taking everything into consideration I believe the experiment was most worthwhile particularly for the student teachers.

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Life Out of the Soil

by P. H. H. Gray Department of Bacteriology.



The author examines cultures of soil bacteria.

over again what some other fellow has already done."

Much of the work done in "agricultural research" is repetition, but it is often very necessary repetition; and this is true in work relating to soils, for there is not one soil but there are many soils, differing in origin and resulting from the effects of different climatic conditions. Even in work relating to one soil there is the necessity to check results from season to season, for the largest group of living organisms, the bacteria, are never static, but working energetically at all times; the intensity of their work, however, varies from day to day and from year to year. In fact it is not safe to say that they are active to the same degree between any two-hour periods during a day or night. Work in the laboratory that step by step clears up many puzzling matters of great moment to the scientific worker may leave the farmer cold; nevertheless the farmer may often derive great practical benefit from some of that work. In the field of soil bacteriology, the most outstanding, perhaps, of these benefits arose out of the work of Lawes and Gilbert at Rothamsted, England, two Germans and a Netherlander. The puzzling question was, "Whence does the legume tribe of plants get nitrogen?" If provided with nitrate, they behaved like other plants. If not so provided, they yet made excellent growth and on analysis were found to be well supplied with nitrogen. The answer proved to be "From the air"; the next question was "How?" The Dutch bacteriologist provided the answer, and this was that bacteria in the nodules on the roots not only caused the formation of the nodules, but collected nitrogen gas from the air and converted it to their own use; later, the plant assimilated it, and thus did not need to deplete the soil of its small store of nitrates. From this laboratory work the practice of inoculating legume seeds with the appropriate bacteria has developed, and it is now possible to grow many legumes in soils that normally lack these bacteria.

The truest application of the principles of scientific thought and work lies in what is often reproachfully referred to as academic research. This disrespect may often be soundly based, especially if the word be wrongly pronounced, as it usually is — research, for it may then rightly be restated as "doing

Another example of an apparently futile type of work eventually proving to be of practical value arose out of philosophical studies and much experimentation on why meat and vegetable infusions went bad. It was discovered that boiled infusions often did not become putrid; if, after being boiled, they were sealed to prevent air from re-entering, they remained in good condition. The cause of the putridity was eventually found to be through the development of bacteria, that are always floating in the air, and blown along with every bit of dust; but long before this point was cleared up, the discovery was put into practice for the preservation of meats and fruits.

The soil is the breeding ground of an immense number of different varieties of bacteria as well as of moulds and other livestock. It is known that there may be as many as 5,000,000,000 bacteria in a salt-spoonful (one-thirtieth of an ounce) of rich soil, but the functions of all the different kinds is not known. It is known, though, that most of these micro-organisms congregate around the roots of plants, probably because the root-excretions set free nutrient substances into the soil solution. Some varieties of oats suffer at times from a disease, a mottling of the leaves, known as "grey-speck". This may have its origin from a deficiency of a mineral nutrient, manganese, but it may also be associated with a group of bacteria or moulds, which may interfere with the plants' proper use of what manganese is present in the soil solution. A planned study of the many different kinds of micro-organisms around the roots of healthy and diseased plants may point the way to finding a remedy, or at least an explanation, for such diseases.

A parallel situation is found in the work on the bacteria that destroy the debris of plant skeletons, root, stem, and leaf, that year after year become incorporated into the soil. Studies, purely academic, since 1856 have demonstrated that the chemical unit of cell structure, cellulose, is disintegrated by bacteria or moulds. Many species that have this power have been described. The isolation of the bacteria, for systematic study, is usually a matter of putting paper (pure filter paper) or cotton into a nutrient fluid containing a suspension of soil; the bacteria use the cellulose as part of their food. Practical use has been made of the fact that some of these bacteria produce combustible gas from plant refuse; in fact, in India, the gases are burned to warm the tanks, or operate the pumps, in a refuse-fermentation plant — a virtuous circle!

A new approach, based originally upon an hypothesis, to this aspect of microbiology, is to feed the bacteria with starch, which is structurally like cellulose; this speeds up their isolation for study, and also appears to segregate some unknown species. Since starch is the starting point of many fermentations, some of the new species may be

useful in reactions in which alcohol or butylene glycol are some of the products desired by industries whose purpose is the production of power alcohol or "synthetic" rubber.

The discovery of penicillin, a product of the growth of a species of mould, arose out of the chance contamination of a bacterial culture in a dish of jelly. The run-of-the-mill worker would have discarded the culture as spoiled, but Dr. Fleming, to whom mankind is indebted for penicillin, noted the fact and reasoned from it. The present significance of the discovery was not apparent for a number of years. The soil may contain, among its many microscopic fungi, some that may yet prove to produce antibacterial substances of hitherto unknown power. It is the aim of planned studies to discover the most active kinds and to ascertain their cultural needs and their capabilities.

ANIMALS RENDER SERVICE . . .

(Continued from page 4)

Feeding and raising dairy calves without skim milk and with minimum quantities of whole milk is by no means a new problem. It is seemingly a never ending problem largely because of the ever-advancing knowledge of calf-hood dietary requirements and the availability of more

suitable food products with which to provide these requirements. Considerable work has been undertaken with calves in an attempt to find combinations of feed to furnish the young, growing calf an adequate diet, and so prevent at least some of the calf ailments which cause so much loss of thrift or even life in dairy herds.

The cattle herds, both beef and dairy, are subjected regularly to almost all known tests for health: T.B., Bang's disease and mastitis tests are conducted regularly. In the case of mastitis, considerable bacteriological work is done in an effort to determine the efficiency of recommended treatments. The most recent venture has been the vaccination of all calves between the ages of four and eight months as a protection against Bang's disease, or contagious abortion.

The Macdonald College dairy herd serves, as will be seen, as quite an extensive laboratory and at the same time produces considerable revenue. The herd is maintained almost without the purchase of foundation stock as can be seen when it is related that out of the 140 females at present in the herd, only three, now aged cows, were purchased, and four entered the herd on an exchange basis.

How To Control A Few Common Insects

Insect	Damage Caused	How Controlled
Cutworms	Plants cut off at ground level	Poison bran mash spread around plants. 2 or 3 pounds of bran, 2 ounces white arsenic or Paris Green, enough water to make a stiff mash. Spread just before nightfall and renew every few days.
Flea beetles	Tiny holes in leaves	Dust plants with Copodust or with hydrated lime.
Cabbage maggots	Destruction of young cabbage and cauliflower plants by eating stems and roots	Corrosive sublimate, $\frac{1}{4}$ ounce in $2\frac{1}{2}$ gallons of water. Apply one cup of this solution around the root of each plant three times during the season at intervals of a week, starting one week after the plants are first set out.
Striped cucumber beetles	Eats leaves of cucumbers, squash, etc.	Dust plants with a mixture of 1 part arsenate of lime in 20 parts hydrated lime, or with Derris dust.

Canadian Prisoners of War are Studying Agriculture

Prisoners of war in Germany are keeping up their studies, with the help of study material furnished by the Canadian Legion, and classes in agriculture have been organized in at least two camps.

The men taking these courses have various reasons for doing so. Many of them are farmers' sons, or were themselves farmers before the war, and are taking this opportunity to get a broader knowledge of agriculture. Others are planning for a career in farming after the war and still others are preparing for admission to an agricultural college when they are released.

At Lagar "A" a course on hog production has been completed. The instructor was Sgt. Pilot N. S. Smith of the R.A.F. who was a successful hog breeder in England before the war. The course in Dairying is being given by Sgt. Obs. J. R. Jamieson, R.C.A.F., a graduate of the

O.A.C. at Guelph. Diseases of cattle are being taught by Sgt. J. Bonnet, Royal Rhodesian Air Force, who was employed in dairying by the Rhodesian Government.

Field Crops and Tillage are taken by Sgt. R. Harper, who got his training at the Manitoba Agricultural College. Before the war he was engaged in mixed farming. Sheep Husbandry is taken by P/O Neil Lindsay, R.A.A.F., an Australian Diploma in Agriculture graduate who has had experience in sheep husbandry and wool grading in Australia and New Zealand. Poultry work is taught by Sgt. Greg, R.C.A.F. who got his experience with a commercial hatchery in Ontario.

Sgt. George Gibb, R.C.A.F., a graduate of Macdonald College, is conducting classes in Fruit Farming and Bee Keeping and courses in Agricultural Economics and Farm Management are given by Sgt. J. L. Boyd.



CO-OPERATION AND MARKETING

A page of interest to members of farmers' co-operatives

Public Must Understand Co-ops

"By and large the public likes the cooperative movement," Secretary Wickard recently told the National Council of Farmer Cooperatives. "But if the cooperative movement is to continue in its high state of public acceptance, he added, there are three primary points to keep in mind."

"First, maintain a sound businesslike cooperative structure; second, adhere to your ideals that are in the public interest, and third, see that the public understands your motives and your principles and your course of action."

"One challenge to the cooperatives today is to develop further their personnel training program. There is always a need to perpetuate good leadership by training men for key managerial positions. The demands upon the ingenuity and skills of leadership after the war will, in all probability, be even greater than during the war."

"To cope with post-war problems will present both an opportunity and an obligation to cooperative leadership, as well as to cooperative members in general. It is an obligation because all of us owe it to our fighting men and to our country to do everything we can to avert the chaos and human misery that stalked our Nation after the last war. By planning ahead, cooperatives will have an opportunity to enlarge their operations, and to strengthen their organizational structures so as to render greater service."

Outlining points which cooperatives can well afford to consider in their planning for the future, the Secretary said that:

1. They must continue to justify their existence by services performed. For the consumer cooperatives as well as the farm supply cooperatives, this may mean reaching back farther toward the sources of supply and working closer with the primary producers of these supplies. For the producer cooperatives this may mean more widely extending services toward the consumer.

2. They must adhere more closely than ever to that precept of their legislative charter: to prevent inefficient and wasteful methods of distribution.

3. They must think in terms of volume of business and savings — but they must not lose sight of the contribution they must make to the welfare of their members and to the general welfare if they are to maintain and expand their position in the American social and economic system.

4. They need to better inform the general public as to what they are trying to do and how they are doing it.

5. Farmer cooperatives need to work closer with the other great segments of the American public. As groups

which have a responsibility to the general public, it behooves them to cooperate closely with labor, for example.

6. Cooperatives must keep their own house in order so that at all times they will be able to muster their full strength against the winds of adversity.

Farmers Warned Against Dubious Co-op. Enterprises

Strong warning is being issued by agricultural leaders to farmers to guard against investing their money in shares and stocks of dubious concerns, particularly those parading under the name of genuine co-operatives. High pressure stock salesmen are exploiting wartime prosperity to push the sale of shares in such enterprises, organized by those who have only selfish interests to serve, and do not in any way represent the best interests of agriculture. A number of such enterprises have come to light recently. Farmers who are approached to buy shares in them are warned to make certain of all the facts connected with the method of organization and operation of such enterprises. Most of them will be found not to be co-operatives at all in the true sense of the word, nor based on proper co-operative principles, but, as pointed out by agricultural leaders who have done some investigating, are merely private enterprises falsely cloaked with the name "co-operative." — C. F. A. Bulletin.



Two splendid teams of draft horses photographed at the Shawville Fair last summer. They are shown with their owners, Warren Campbell, Wyman, P.Q. and Edwin Pirie, Maryland, P.Q. who sent us the snap.

Market Comments

New grading regulations for hogs came into practice on April 10, 1944. This change raised the price of B.1, dressed at Montreal from \$17.15 to \$17.25 per hundred-weight.

Other important announcements of the month included one by the Minister of Trade and Commerce that for the 1944-45 crop year the individual quotas on the amount of wheat accepted from the growers would be larger than in the previous crop year. Quotas have not been definitely settled at time of writing but this announcement was made at seeding time.

It was announced by the Minister of Agriculture that legislation providing floor prices for farm products is now being prepared.

The most impressive news of the month was in the apple market. The weekly market report of April sixth quotes Ben Davis apples at \$10.00 per barrel at Edmonton, Alberta. The two later issues since that date do not mention quite as high a price. It is not surprising that this price for this particular variety of apples could happen once more easily than more frequently. This reason makes even the rare occurrence real news.

The daily press points out that stock yards at both Winnipeg and Edmonton are congested with hogs. Shippers are advised to hold back shipments. Hogs must be marketed when ready. Holding hogs off the market even for a few days results in loss to feeders from lower prices for overweight as well as an increased total volume of production.

TREND OF PRICES

	April 1943 \$	March 1944 \$	April 1944 \$
LIVE STOCK:			
Steers, good per cwt.	12.30	12.35	12.25
Cows, good, per cwt.	10.15	8.85	9.10
Cows, common, per cwt.	8.05	6.70	6.95
Canners and cutters, per cwt.	6.65	5.60	5.82
Veal, good and choice, per cwt.	14.50	15.85	12.95
Veal, common, per cwt.	13.10	14.15	8.85
Lambs, good and choice, per head	14.50	—	6.00-7.00
Lambs, common, per cwt.	14.50	14.50	8.85
Bacon hogs, dressed, B.1, per cwt.	17.00	17.15	17.15
ANIMAL PRODUCTS:			
Butter, per lb.	0.35	0.35	0.35
Cheese, per lb.	0.22	0.21	0.21
Eggs, Grade A large, per doz.	0.35	0.35½	0.35½
Chickens, live, 5 lb. plus, per lb.	0.29	0.29¾	0.30⅞
Chickens, dressed, milk fed, A per lb.	0.35	0.35	0.37½
FRUITS AND VEGETABLES:			
Apples, B.C. McIntosh, extra fancy, per box	2.75-3.00	—	—
Apples, B.C. Delicious per box	3.80-3.95	—	4.00
FEED:			
Barley, per ton	29.00	29.00	29.00



First Prize Group, Central Canada Exhibition, 1943, Junior Department. Left to right, L. MacKechnie, R. MacKechnie, D. MacKechnie.

Must Continue International Planning

The need for continuance of international planning after the war, particularly in the field of food and agriculture, was emphasized by H. H. Hannam, president and managing director of the Canadian federation of agriculture, in an address before the American Country Life Conference, April 11, at Chicago. Re: the united nations food conference declarations last May, Mr. Hannam said "These decisions, it seems to me, have very great significance for our farm people. If the declarations of that conference are to be more than lofty ideals and fine-sounding phrases, they must be interpreted and applied in practical programs." The whole plan of the conference, he said, was predicated on a greater abundance of food for the people everywhere. Farmers believe in the economy of abundance, and will willingly do their part, said Mr. Hannam, but they recall too vividly the misfortunes that followed upon production of abundance in the past. If they are to produce in abundance in the future that the world may be adequately fed, they must be assured that there will be markets for all they produce. That meant international planning, and he indicated that organized agriculture in the allied nations could give leadership, and should be preparing to get together in conference in the matter.

Co-operative Membership in Sask.

One person in every four in the province of Saskatchewan is a member of a co-operative organization, according to returns made to the Saskatchewan legislature. Co-operative marketings totalled in value \$104,500,000 for the year ending April 30, 1943, compared to \$63,800,000 the previous twelve months. There were 802 organizations with 250,800 members. — C. F. A. Bulletin.



DEPARTMENT OF AGRICULTURE

Activities, Plans and Policies of the Quebec

Department of Agriculture

Departmental Policies—Continued

Animal Husbandry Branch Horse Division

In the April issue of the *Journal* we began a summary of the activities and policies of the Quebec Department of Agriculture. This is the second in the series.

Joint programme of breed improvement: As a means of improving the quality of horses in this province, both the provincial and the federal governments contribute to this policy. It enables owners of stallions to keep their animals in the best of condition; helps with costs of maintenance, insurance, interest on the investment etc. Bonuses are paid to owners of "A" or "B" stallions: up to \$300.00 for "A", up to \$200.00 for "B". The owner must send in a list, in duplicate, between October 1st and December 1st, of all mares served by any stallion bonused by the local agricultural society and, between April 1st and July 31st, another list showing owners of all mares in foal to the stallion. These lists must be sworn to before a notary or justice of the peace. If the lists arrive after the 31st of July the bonus is cut 20%.

Loans to agricultural societies: Loans are available to help buy good stallions: up to \$1,000.00 for an "A" stallion, up to \$600.00 for a "B". The loan must be made through the local agricultural society, which must send in to the Department the registration certificate, duly made over to the new owner; a receipt showing that the buyer has paid from his own pocket at least one-quarter of the purchase price of the horse; the seller's bill; two copies of a loan agreement between the buyer and his agricultural society, duly authorized by the directors of the society and by a representative of the Department of Agriculture. The loan is repayable in four years without interest, in equal annual payments, and the bonuses mentioned in the preceding paragraph may be applied against the loan. No loan will be made to any society which is behind in its payments, or if it has already received a loan for the purchase of another animal, and which has not been cleared.

Purchase bonus for pure-bred mares: As an encouragement to the improvement of horses, a premium of 20% of the purchase price is allowed on the cost of a pure-bred mare bought by any farmer or breeder. The same mare can only receive the premium once, and the limit is \$60.00.

Young colt raisers' clubs: To start junior breeders in the right methods, the Department offers prizes for the competitions held by these young breeders' clubs. The competition must be organized by the agronome, preferably

in those districts where horse breeding syndicates are already in existence. It must be arranged before October 1st and the list of members sent in before July 15th. The Department sends judges and reserves the right to limit the number of competitions which may be held. If there are any irregularities about the competition or any infraction of the rules, the prize money may be withheld.

Aid to colonization districts: In an effort to stimulate the raising of good horses for the use of colonists, the Department loans stallions and pays the transportation charges on them. A stallion will be loaned if there is none other within 15 miles of the centre and if the request comes from the regional agronome. At least 15 farmer-colonists must agree to use the stallion's services and they must agree on some one man to have charge of him. This guardian signs a three-year contract with the Department, and at the end of that time may dispose of the stallion in any way he sees fit. The Department of Colonization pays half the cost of this policy.

Division of Fur-Bearing Animals

Aid to fox breeders: A bonus of \$1.00 for each choice quality pelt. The bonus is paid to any member of a breeding syndicate in his district who sells his furs through the syndicate and has them graded by an official grader.

Aid to mink breeders: A bonus of 50c. for each choice quality pelt. The same conditions as those for fox breeders apply. In each case payment of the bonus is made through the syndicate.

Dairy Industry Division

This Division applies the Dairy Products Act and inspects all factories where dairy products are processed: issues permits to graders of butter and cheese etc; in general, oversees all operations concerned with the manufacture and processing of all products made from milk. In districts where transportation difficulties exist, as in colonization districts where the erection of a butter or cheese factory is not feasible, producers are helped to market their milk in the most economical fashion.

This Division also prepares and sends out plans and specifications for the construction or improvement of factories, gives advice as to operation etc. with a view to improving the general condition of establishments processing dairy products. Assistance and advice with regard to the accounting systems used is also freely given. An effort is being made to establish a uniform system all through

the province, with encouraging results. Improved accounting systems have already been set up in three quarters of all the factories in Quebec.

Premium on cheese: A premium of 2c. per pound on all cheese scoring 92 or better is paid as an encouragement to greater production of quality cheese.

Premium on butter: The Division supervises, for Quebec, the payment of the 8c. premium per pound butter fat.

Training of technicians: Scholarships, to the number of from six to ten each year, are offered for promising students who wish to specialize in the dairy industry. Candidates are carefully selected and trained both in theory and practice.

Farm Construction: On request from farmers, advice will be given concerning the building of stables, piggeries, poultry houses, and all different types of farm buildings. Blueprints and plans for many different types of construction are available. Visits to farms in connection with this service are also made and literature on the subject of farm construction is mailed on request.

Sheep and Swine Division

Grants to Agricultural Societies: Grants are made to societies which assist in the maintenance of quality boars. If the boar has been bonused by the society for at least one year, the Department makes a grant of \$10.00 for a XX boar if less than 17 months of age, and \$15.00 for a XXX boar of similar age. \$20.00 is granted for a boar aged between 17 and 30 months, and a boar over the maximum age may also be bonused at the \$20.00 rate if it is his first period of service in the locality. The grant is paid to the club secretary, and the guardian is entitled to 50c. for each service for club-members, and \$1.00 for non-members.

Purchase premiums for classified hogs: Farmers who try to improve the quality of their hogs by buying classified animals may apply for purchase premiums. These premiums are as follows:

Boar, XXX, qualified on both sides	\$12.00
Boar, pure bred, XXX.....	10.00
Boar, pure bred, XX	5.00
Sow, XXX	5.00

Loans of boars to colonization districts: Good quality boars are loaned to colonists under a joint policy with the Department of Colonization. A boar is sent to any district where there are enough sows to make it worth while, and is placed with someone who agrees to look after it and to make its services available to his neighbours for at least two consecutive years.

Junior Hog Clubs: Financial aid is given to young farmers' hog clubs. To obtain the grant each club must have at least 12 members, aged from 12 to 20, each of whom must contribute \$1.00 per year to the club funds.

Each member must raise one litter of piglets, must keep his hogs off the market until they weigh between 200 and 210 pounds, show at least 2 animals at the club show. Organization of the club must have received the approval of the Department. Both provincial and federal governments contribute to this policy, under which the following grants are made:

To a club with from 12 to 15 members	\$ 75.00
To a club with from 16 to 20 members..	100.00
To a club with from over 20 members	125.00

Grants for pure bred rams:

Bonuses are paid for pure bred rams at the following rates:

Ram, 2 or 3 years old, classified XXX...	\$6.00
Ram lamb or ram, one year old, XXX.	6.00
Ram lamb, classified XX	3.00

The year old animals must have been classified by a federal man, and request for classification must be made before the 1st of September each year. Rams, 2 and 3 years old, are classified by a Provincial man according to their capacity to head a pure bred flock. The grant is payable on production of the registration certificate transferred to the buyer.

Cross bred sheep clubs: This is a joint policy with the Department of Colonization, to encourage sheep raising in the colonization districts. If 15 or more farmers form a club and buy from 2 to 5 sheep each (less than three years of age) all costs above \$3.00 per lamb and \$5.00 per sheep are borne by the two departments. The farmer agrees to dip his sheep, treat them against parasites and castrate his ram lambs. In addition to paying part of the purchase price, the Department furnishes one ram for every 10 ewes bought.

Junior sheep clubs: This is a joint policy with the Federal Government. Club members must be between the ages of 12 and 21. Each club, in order to benefit, must have at least 12 members who are expected to each buy 3 sheep but not more than 10. Each club member must take complete charge of his flock, castrate his ram lambs, dip his sheep once a year and treat them for parasites. A sum of \$185.00 is provided for prizes at the end of the season.

Production centres for market lambs: Encouragement is offered to farmers, members of an agricultural society, who have the proper facilities to raise lambs for market. The farmer must own at least 5 breeding ewes, agree to cull his flock carefully, use a pure-bred ram, castrate his ram lambs at about two weeks of age. He must sell his lambs co-operatively. The Department assists such breeders by granting \$3.00 for each ewe lamb bought, up to a maximum of 10. If stock is not obtainable in the district, the Department will provide ewe lambs for \$8.00 each up to 50 animals. In each production centre 10 rams will be loaned for breeding for each 25 members. A competition is organized each year with a sum of \$300.00 in prize money which is divided among the members. A

further bonus of 75c. is offered for every lamb weighing from 80 to 100 pounds.

Bonus for clean wool: A bonus for clean wool, amounting to 4c. per pound, is paid in conjunction with the Federal Department.

Bounty on bears: To anyone killing a bear in a settled district, a bounty of \$5.00 is paid. Proof, in the form

of a sworn declaration, and presentation of either the whole carcass or the head with both ears attached, must be given, and the bear must have been killed in a locality where it was a definite danger to farm livestock.

Bounty on wolves: The bounty on wolves is \$15.00 and proof, in the same manner as mentioned above, must be given.

Annual Report of the Shawville Calf Club Shows Splendid Record

The Shawville Calf Club reported a very successful year at the annual meeting. The Club showing took place during the Shawville Fair on September 17th with eleven members taking part and the calves shown were of much better quality than in previous years. The standings in the Ayrshire section were: Douglas MacKechnie, Laurie MacKechnie, Ronald MacKechnie, Billy Horner, Everett McDowell. In the Holstein section the standings were Clarence Kilgour, Ivan Dagg, Billy Pirie, Jackie Pirie, Clayton Pirie and Donald Horner.

The four highest Ayrshire calves were selected to represent the Club at Renfrew where the Junior Department of the Central Canada Exhibition staged its show on October 2nd. Douglas MacKechnie won grand champion

with his calf, Laurie MacKechnie reserve. Ronald MacKechnie was reserve champion showman of all breeds and his calf was in the "A" group; Billy Horner placed in the "B" group with his calf. The three highest calves won the first prize group from one calf club, the second year in a row that this competition has been won by Shawville.

In judging dairy cattle at the Provincial Judging Competition at Sherbrooke, Douglas MacKechnie and Billy Horner represented Western Quebec.

The following present and former members of the Club are now in the armed forces: Irvine Brownlee, Iverson Harris, Gilbert Kilgour, Gordon Meldrum and Lionel Hanna.

Payment of Hog Premiums Now Made by Warrant

The Dominion Government began payment on Monday, April 10th of hog premiums of \$3 on each A grade carcass, and \$2 on each B1 grade carcass paid by government warrant attached to the grading certificate.

Since January 24, 1944, when these premiums were inaugurated to encourage the channelling of good bacon hogs through inspected abattoirs so that they would be available for export to Britain, the premiums were paid by the packers along with the regular settlement for the hogs. This was a temporary arrangement until a plan could be worked out whereby the premium could be paid direct to producers.

A new combination form has been printed which includes three sections. Across the top is a blue tinted warrant, which resembles a cheque, and which will be made out to the producer of the hogs for the amount of premium payable, and signed by a grading inspector of the Dominion Department of Agriculture. The middle section is an official

hog carcass grade certificate, and the lower portion is designed as a statement of settlement to be used by the sales agency, packer, or shipper to show weights, prices, and total value of the hogs.

This document reaches the hog producer through the same channel followed by the grade certificate. The warrant is to be detached and taken to any bank where it will be cashed at par after the payee has endorsed it on the back, certifying that he is the person lawfully entitled to the amount shown. The producer retains the remaining portion of the form as his record of the grade and settlement.

The Dominion Department of Agriculture states that, when marketing hogs, the producer should make sure that his correct name and address is recorded on the manifest by the shipper, as well as the number of hogs and the correct identification mark. This will avoid delays and expedite the prompt return of the settlement to the producer along with the Premium Warrant.

The practice of greasing the one-way disk often with a moderate quantity of grease will give better lubrication than less frequent heavy greasing to the greatest capacity of the bearing.

A tip for Victory gardeners to remember is to avoid working among such plants as cabbages and beans when they are wet because there is a danger of spreading plant diseases.

Official Hog Carcass Grades

The schedule of official grades for hog carcasses has been modified to reduce the number of classes in the "C", "D" and "E" qualities. These changes, which became effective on Monday, April 10th, are the result of a considerable demand from producers and their representatives that the number of grades be reduced.

<i>Old Grades</i>	<i>New Grades</i>
A 140-170 lbs.	A No change
B1 135-175	B1 No change
B2 125-134	B2 No change
B3 176-185	B3 No change
C1 135-175	
C2 120-134	C 120-185 lb.
C3 176-185	
D1 135-175	
D2 120-134	D 120-185
D3 176-185	
Lights 119 lb. and under	Lights No change
Heavies 186-205	Heavies 186-195
Extra Heavies 206 and over	Extra Heavies 196 and over
E thin	
E rejected and condemned	
E physical injury	Physical injury
E ridglings	Ridglings
E stags	Stags
Sows No. 1	Sows No. 1
Sows No. 2	Sows No. 2

Holstein Breeders Plan for the Future

Holstein breeders in Quebec have drawn up a "five year plan" of activities covering the major policies which will be followed in their constant efforts to improve the quality of Holstein herds in this province.

Stress will be laid on vaccination and herd qualification, on the increased use of milking records, and on a still more rigorous scale of qualifications for registration. The fight against mastitis and contagious abortion will be continued and efforts will be made to encourage the use of better herd sires. Advertising, propaganda, and the Black and White Days will be featured.

C. L. Goodhue, first vice-president of the national organization presided at the meetings where these plans were drawn up and Hermas Lajoie, the provincial field man, took a very active part in the deliberations.

Four New Seed Potato Centres Organized

Quebec Province will produce more seed potatoes this year with the opening of four new centres of production, in the counties of Matane, Riviere du Loup and Rimouski, which will specialize in Green Mountains, and in Mata-pedia, where Irish Cobblers will be grown.

Watch For The Mexican Bean Beetle!

Last year a new insect enemy appeared on the Quebec farm front. This was the Mexican Bean Beetle, first found in Brome County and then later in Chateauguy. Huntingdon and St. John. This pest attacks bean plants by eating away the undersides of the leaves causing eventual death of the plant.

The Plant Protection Service took prompt measures to combat this new insect last year, but nevertheless it is feared that the pest will cause serious damage this season. All farmers who grow beans, and particularly those in the Eastern Townships near the border, are urgently asked to make careful examinations of their bean fields as soon as the plants are up and to advise the provincial authorities if any apparently new insect is noticed.

An illustrated bulletin, in English and in French, which describes the insect and gives methods for its control, has been prepared by Dr. George Gauthier. It may be obtained free from the Publications Division of the Department of Agriculture.

Quebec Egg Production Will Set A Record In 1944

There are more than four million laying hens in Quebec at the present time, and there is no doubt that a record for egg production will be set this season. We will have enough for all local needs and will have a substantial surplus for export. During the first three months of 1944 Quebec shipped overseas 1,817,220 dozens of eggs, more than three times as many as in the same period in 1943.

Quebec poultrymen have a chance to make a reputation for quality, and to obtain and keep post-war markets for quality products, and to help them maintain egg quality egg-candling stations — 223 of them, — are now in operation in various parts of the province outside the big cities.

A New Use For Flax Waste

The waste from the scutching of fibre flax, which is usually burned to get rid of it, is coming into its own. This material is now in great demand for the manufacture of insulating material, and is also being put to use as litter for poultry houses. Several flax mills in Quebec have already sold all this product for the next few years.

Butter and Cheese Quality High

There is nothing wrong with the quality of butter and cheese produced in Quebec. In the year 1943, 93¾% of our cheese and 94¼% of our butter graded No. 1. We produce more No. 1 butter than any other province in Canada, and are but a fraction of a point behind Ontario with respect to cheese. Total production of butter in 1943 was 85,569,393 pounds, an increase of 17.3% over 1942. Cheese production at 48,487,460 pounds was 23.1% less.



THE WOMEN'S INSTITUTES SECTION

*Devoted to the activities of the Quebec Institutes
and to matters of interest to them*

Quebec Institutes Sponsor School Fairs

by F. Grace Yates

For years, the sponsoring of School Fairs has been an important phase of Institute work. And now, as always, some branches are doing splendid work in this line, while others seem to feel that the results do not justify the time and money that such a project entails, especially in these war days when the need to save both is urgent. It is true, of course, that in each school there will be some pupils who will start out in a burst of enthusiasm in spring and then, as interest wanes, will allow weeds and insects to take over completely. But the number of these who fall by the wayside is comparatively small, particularly if the proper instructions and encouragement are given by teachers and parents.

And why School Fairs? For one thing, they provide the pupils with a real incentive to grow vegetables, to learn to can, etc. Hoeing the farm garden after his other chores are finished may not hold much attraction for Johnny, but give him his own special corner of it, together with the knowledge that extra thorough care and cultivation may bring him a reward later on, and he'll attack the job with a vim. Then, in no time at all, he'll be finding satisfaction simply in watching the plants flourish and mature under his careful attention.

And Mary may not hail with delight the task of helping mother with the family's supply of tomato juice, but if she feels that she is learning to do something that will give her a coveted prize ribbon, she too will find new pleasure in the work. In this way a very real interest in this line is soon built up and when this is acquired during childhood, it is very likely to last all through life.

Furthermore, the vegetables grown and canned by school children could add up to an appreciable amount and would be a valuable contribution to the home food supply and, in turn, to the country's wartime food problem. Most of our children on the farms are willingly helping

with extra chores, now that everyone is short-handed. But if they realized that they could do their bit towards increased production, how much greater would be their effort, especially with the incentive of monetary reward to spur them on.

Finally, there is the spirit of good sportsmanship which is developed by competing with others at these Fairs. The child who can see that his friend's entry is really better than his own, and who can "take it with a smile"—while resolving to do better next time—is learning a lesson that will be invaluable to him later on. These are but a few of the reasons why School Fairs should receive our full support.

What Has Been Accomplished

Now let us take a look at what some of our Institutes are accomplishing. Recently I asked the County Conveners for information on this subject and, to date, I have received reports from 15. Of these, 9 tell of work done in this line. From the details at hand, honors for the longest term of service in this respect go to Pontiac County, their School Fair dating back to 1914. The project was started first by the local agronomist but when he, and in turn his successor, left the County, the Elmside Institute took over and conducted the Fair alone. Until 1928, it was held in the Bristol Town Hall but since then the Elmside Intermediate School has been used, the basement being converted into an exhibition hall. Money for prizes is subscribed by the County Council, the local school boards and the Farmers' Club. Judges are chosen from outside the County and, for the past 5 or 6 years, the Q.W.I. Demonstrator has acted in this capacity. A prize list is sent to each family, also a set of rules and instructions as to how the exhibits are to be selected and prepared. There are 11 classes, namely; vegetables, flowers, canning, cooking, sewing, woodwork, art work, writing, drawing, map drawing, and letters. (for the smaller children).

In order to encourage the pupils as much as possible, 8 prizes ranging from 60c. down to 10c. are awarded. The children are encouraged, too, to make speeches, recite, etc., and races and games are enjoyed by all. Lunch is in the form of a basket picnic, thus making the Fair a real community event.

A parade is an important part of this Fair, each school in the County carrying a banner, and to the one having the highest percentage of its pupils present, the Institute awards a prize.

Convention Dates Settled

Mrs. W. C. Smallman, President of the Q.W.I., asks that the Institutes be reminded through these columns that the Annual Convention of Quebec Women's Institutes will take place at Macdonald College in the week beginning June 26. It is hoped that every Branch will be represented at this year's Convention.

The Hudson-Como & Hudson Heights Branch of the W.I. (Vaudreuil County) has an enviable record of service also, having sponsored a School Fair for the past 10 years and, in 1943, distributing \$40.00 worth of War Savings Stamps as prizes. Seeds were distributed by the County Agronome to the pupils of Hudson High School and gardens were planted at the rate of 80% of those who accepted seeds. A Government representative judged these gardens and 10 prizes were given for the best kept ones. At the Fair, children were awarded prizes for the best vegetables, flowers, etc., and a model plane competition drew a lot of comment. Upon conclusion of the event, 2 sacks of vegetables were sent to a Montreal hospital and were gratefully acknowledged by same.

In Richmond County, a Fair is held annually in Danville, and is sponsored by the Shipton W.I. The prize list includes classes in cooking, sewing, handicrafts, vegetables, public speaking, etc., with special emphasis on plenty of classes for those in the lower grades. This Institute finds that rather than ask for donations, it is more satisfactory to hold a card party or dance, with proceeds to be devoted to this purpose. To create more competition between schools, a cup is given, to be held for one year by the school gaining the most points — 50% for sports, 50% for exhibits.

Gaspe County has had a Fair ever since the Institute was organized there, the 1943 exhibition being held at L'Anse aux Cousins. Classes are the same as those mentioned above. The County usually gives 1 Stamp as first prize, with 2nd. and 3rd. in proportion, and individual branches contribute also.

In Compton County last year, Brookbury Branch gave \$5.00 to the Bury School Fair, to be used for prizes. Cookshire contributed seeds in spring and Stamps for prizes later. Canterbury gave \$5.00 to the local Fair and members assisted in serving lunch at same.

Megantic County sponsored 2 Fairs and gave prizes for classes in bread making, sewing, knitting, embroidery, drawing, writing, flowers, vegetables and poultry.

Gatineau County, too, sponsored 2 Fairs and Argenteuil County promoted Calf Clubs at the regular autumn Fairs.

In Stanstead County, much assistance as well as the more tangible contribution of \$38.00 in prizes was given to the School Fair held in Ayer's Cliff.

Valcartier Village, in Quebec County, provided seeds and sponsored the local Fair and in Missisquoi County, Dunham Branch did the same.

War Services Report

Argenteuil County. Knitting, 132 articles; Sewing 116 articles; Self-denial Fund, \$48.50; Ditty bags, 56; parcels for overseas men, 180; Red Cross, \$158.09; Biltz Children's Fund, \$4.75; Seeds for Britain, \$2; War Savings folders filled, 9; War Savings Stamps bought, \$15.74; Aid to Russia, \$15; British Children's War Service Fund, \$8.

Brome County. Self-Denial fund, \$1; Ditty bags, 2; Quilts, 5; War Savings Folder filled, 1; parcels to men overseas, 14; War Bond, \$50.

Chateaugay County. Self-Denial Fund; \$17.50; Articles of knitting, 30; Articles of sewing, 115; Quilts, 10; Parcels for men in forces, 45; Ditty bags 5; Bundles for Britain 10; Seeds for Britain, \$2; War Savings Certificates, 3; British Children's War Services Fund, \$8.

Compton County. Ditty bags, 18; British Children's War Service Fund, \$5; Seeds for Britain, \$2; Wool afghans, 5; Quilts, 23; Wool blankets, 2; Cans of jam, 226, Red Cross, \$33; Bundles for Britain, 2; Greek Fund, \$5; Hong-Kong Fund, \$5; Queen's Fund, \$5; Sugar for canning, \$18.75; Parcels for men overseas, 27; Articles of sewing, 185; Articles of knitting, 118.

Gatineau County. Self-Denial Fund, \$9; Knitting, 47; Sewing, 68; Quilts, 3; Parcels for men overseas, 16; Ditty bags, 10; Bundles for Britain, 13; War Savings Folders filled, 2; Red Cross, \$5; Prisoner of War Fund, \$15.; Afghans 1.

Huntingdon County. Self Denial Fund \$18; Knitted articles, 5; Articles of sewing, 10; parcels for men overseas, 13; Ditty bags, 4; Red Cross, \$13.75; War Bonds, \$100; War Savings Certificates, \$20; Aid to Russia, \$7.25.

Megantic County. Ditty bags, 5; Self-Denial Fund, \$18; War Savings Certificates, 5; Knitting, 245; Sewing, 20; 2 boys kits; Quilts, 7; Parcels for men overseas, 20; Pounds of maple sugar, 20; Bundles for Britain, 2; Red Cross, \$25.

Papineau County. Knitting, 15; Sewing, 34; Quilts, 9.

Quebec County. Knitting, 8; Sewing, 24; Quilts, 1; Red Cross, \$10; Parcels for men overseas, 4; War Savings Folders filled, 1.

Rouville County. Self-Denial Fund, \$12; Knitting, 371 articles; Afghans, 2; Quilts 2; Sewing, 850 articles; Parcels for men in Services, 5; Ditty bags, 10; Seeds to Scotland, 7½ pounds; Jam for Red Cross, 500 lbs; War Savings Folders filled, 41; Aid to Russia, 100 lbs.

Shefford County. Articles of sewing, 27; Knitting, 18; Quilts, 5; Parcels for men in forces, 5; Ditty bags, 9; Seeds for Britain, \$2; Maple sugar for Navy League, 3 lbs; Red Cross, \$5; Self Denial Fund, \$11.

Stanstead County. Articles of knitting, 163; Sewing, 142; Quilts, 9; Parcels to men in Services, 106; Ditty bags, 24; Bundles for Britain, 75 articles; Seeds for Britain, \$18.45; Seeds for Australia, \$2.00; Jam for Britain, 389 cans; Red Cross, \$38; British Children's War Fund, \$8; Aid to Russia Fund, \$7.00.

Richmond County. Articles of knitting, 3; Quilts, 28; Crib quilts, 2; Afghans, 1; Spreads, 1; Bundles for Britain, 1; Parcels for men overseas, 4; Ditty bags, 1; Jam for Britain, 16; War Savings Folder filled, 1.

Gaspe County. Self-denial Fund, \$17.50; Knitting, 592 articles; Afghans, 5; Sewing, 230; Quilts, 13; Parcels for overseas, 12; Ditty bags, 51; Bundles for Britain, 4; Seeds for Britain, 5 lots; War Savings Folders filled, 11; Red Cross, \$20; Clothing sent to Russia, \$30; W. I. Stamps bought and distributed as prizes.

Pontiac County. Self-Denial Fund, \$10; Knitting, 22; Sewing, 49; Quilts, 6; Afghans, 2; Parcels for men overseas, 33; Ditty bags, 16; Bundles for Britain, 4; woollen quilts, 8; Seeds for Britain, \$4; Folders filled, 6; Red Cross, \$105; British Children's War Service Fund, \$8;

War Bond, \$50; War Savings Certificates, \$5; Aid to Russia, \$1; Blood Donors' 63.

Richmond County. Self-Denial Fund, \$62; Knitting, 199; Sewing, 27; and 3 layettes; Quilts, 20; Parcels 59; Ditty bags, 20; Leather vests, 4; maple sugar, 83; Bundles for Britain, 1; Seeds for Britain, \$4; Seeds for Australia, \$2; Jam for Britain, 107; Folders, 4; Red Cross, \$35; Other contributions, \$108; Salvage, \$8; Aid to Greece, \$10; War Savings Certificates, 1; Clothing to Russia.

NOTE.

Mrs. H. Smith, Loretteville. War Service Convener, asks that a complete report of war work, covering the year March 31, 1943 to March 31, 1944, be sent to her immediately upon publication of this notice.

JAM FOR BRITAIN

by Rosamond Stevenson

(Mrs. Ailan Stevenson, National Director Nutrition Services, Canadian Red Cross Society)

This month we have good news for you! — a satisfactory recipe for blueberry Jam. If this recipe is carefully followed you will obtain a thick, delicious product that will not ferment or mould on its long journey to Britain. Directions for making Blueberry Jam are given below, along with others in which you may be interested. Obtaining a successful product depends on following all directions very closely.

Candy thermometers are not usually an essential part of household equipment and during the last two or three years the Government has prohibited their manufacture; but dairy thermometers which register 230°F. can be used instead, and may be obtained through Red Cross for any group which is making jam for Britain.

The amount of sugar in some of these recipes is large, but this is a safeguard against spoilage. Groups making jam for Britain may obtain all the sugar they require by special permit from Red Cross, so there is no need to skimp or run any risks that the jam may ferment or mould.

GENERAL DIRECTIONS AND RECIPES

When jam is being prepared for shipment overseas, special care is required to ensure keeping under shipping conditions where temperature changes and movement tend to cause spoilage.

Fruit:

1. The fruit should be sound and ripe or slightly under-ripe. Avoid using over-ripe fruit.
2. Drain the fruit *thoroughly* after washing.
3. Use only the recipes given below. **DO NOT MAKE** cherry jam or elderberry jelly; red currant, apple or rhubarb jams or combinations of these fruits with other fruits.

Equipment:

1. Heating surface should be large enough to heat the entire bottom of kettle.
2. Use a pan at least twice the capacity of fruit and sugar.
3. Either enamelled or aluminum pans may be used.
4. Use thermometer if possible.
5. Handle cans carefully to avoid denting.

Wash cans, but do not soak, in soapy water.

Rinse in boiling water. Dry cans in warming oven being careful not to scorch lacquer; or wipe dry with a piece of cheesecloth wrung from boiling water. Be sure the cans are completely dry, especially in the seams. One drop of water may provide enough moisture to cause mould of fermentation.

Method:

1. Approximately 10 pounds of fruit make a satisfactory amount with which to work.
2. Weigh or measure ingredients accurately. Follow directions exactly.
3. It is necessary to boil to thicker consistency than for home use.
4. Stir jam frequently while cooking to prevent sticking and scorching.
5. After sugar is added cook quickly to be required temperature.
6. Let jam stand five minutes after removing from fire to allow scum to rise. Skim. Stir and pour into dry cans.
7. Fill cans to within $\frac{1}{4}$ to $\frac{1}{2}$ inch below top. Care should be taken that no jam gets into the sealing groove as this prevents a perfect seal.
8. Place anti-mould disc over top of jam while hot.

Do not use wax paper this year.

9. Allow to stand covered with a clean cloth at least 24 hours, until jam has cooled to centre.
10. Press cover firmly into place, taking care not to dent lids or top. Do not hammer lids. To close can tightly and evenly, place a thick board over lid, give one smart blow with hammer.
11. Wipe all cans thoroughly after they are filled and sealed, but do not immerse cans in water.

Use of Thermometer:

1. Suspend the thermometer from a stick laid across the top of the kettle so that the thermometer hangs in the centre.
2. The bulb should be well covered by jam.
3. The bulb should not touch the sides or bottom of kettle.
4. Watch thermometer carefully and be sure the mercury reaches the top of the line which indicates the required temperature.
5. Read the thermometer at eye level without removing from jam.

NOTE.—The Official Red Cross Directions and Recipes in printed form can be obtained from Miss B. G. Fletcher, Macdonald College, upon application.

Q.W.I. Notes

Argenteuil County. Frontier intends to keep a book containing current events during the year. Jerusalem & Bethany voted \$2 towards the County Scholarship.

Lakefield held their meeting at the home of Mrs. Geo. Evans and welcomed three new members. Pioneer: There were 8 entries in a contest for articles made from a yard of material—the winners being Mrs. S. Armstrong, Mrs. Maxwell and Mrs. J. P. Bradley.

Bonaventure County. Annual reports submitted in this County showed that the greatest amount of work had been done for war services. New Carlisle Branch reported a successful card party which netted \$73.10. Three new members in the Branch, and one in Port Daniel was an encouraging feature. The latter Branch gave out yarn for the knitting for 15 ditty bags. Mite-boxes for the Self-denial fund were given to the members, to be opened at the December meeting.

Chateaugay County. Only annual reports were received from this County and these cannot be used here, as all material has previously been published in these columns.

Compton County. Canterbury Branch held a Valentine social with games and music. Prizes were given for winners in games, and refreshments were served. Sick members were remembered with fruit and other good things. A card party netted \$6.50 for the local cemetery fund.

Gatineau County. Aylmer East and Eardley Branches were occupied with the annual meeting routine, the latter Branch distributing yarn for knitting. Wakefield asked for recitations, or a fine of 25 cents. A blood clinic was planned for early in April. Five boxes of books were sent to the Destroyer Gatineau. Mr. Legge gave a splendid talk on Magnesium. Wright Branch made one dozen sewing kits for the Destroyer.

Huntingdon County. Huntingdon Branch provided new furnishings for the sick room in the High School and arranged to supply all equipment for future. The Branch will fill 12 Ditty bags this year, and will undertake a self-denial fund from the Branch. An informative talk on Journalism was given by Mr. S. Smith, Assistant Editor of the Huntingdon Gleaner.

Pontiac County. Papers on Publicity, and on the Club Women's Creed were features of the meeting at Clarendon Branch. Sewing for a Hospital was done. Stark's Corners made several sick calls. A paper on the life of General MacNaughton was read, also a sketch of the life of Mrs. Cameron E. Dow, President of the F.W.I.C. An interesting talk was given by Rev. Mr. White on Religious Education and the Child. Bristol's fine report of War Services will no doubt appear in that report in due time. Bed linen was sent to family of fire sufferers. Elmside voted a donation towards the emergency Fund of the Q.W.I. Beech Grove held its annual meeting. Shawville had a good report of War Services. The sum of \$68. was raised by a bridge marathon.

Richmond County. Richmond Hill held an apron contest. This Branch has collected a total of \$10.70 for the Self-denial Fund. Fruit was sent to a sick lady. Spooner Pond made a presentation to a member. Cleveland also presented its retiring president with a gift. This Branch sponsored work on the Hall grounds and other improvements. Melbourne Ridge held its annual meeting and outlined a programme for the coming year.

Rouville County. An interesting talk on the recently established blood clinic at Granby was given in Abbotsford Branch by Mrs. Morley Honey. Miss Fletcher was guest speaker, and gave an inspiring talk on Nutrition, stressing the importance of attractive and colorful meals. Hints for well-balanced meals were also given.

Sherbrooke County. Presentations figured largely in the last meeting at Ascot Branch. The retiring President, Mrs. W. T. Pearson was presented with a beautiful gift in recognition of her services during her years of office. Also, Mrs. J. A. Woodward was presented with a gift in token of appreciation of her work as Convener of Welfare and Health. This Branch celebrated its twenty-fifth anniversary during the past year. Lennoxville supplied groceries for a needy family, and Milby held a social to raise funds for the

(Continued on page 25)

What's Doing at the Next Meeting?

by Barbara Fletcher

Here are some helps in planning programmes for meetings. Things to keep in mind:

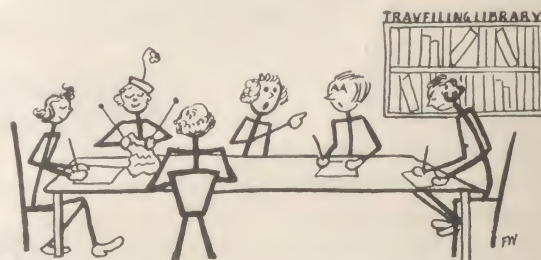
1. **There is a basic programme.** It is already prepared for the year, and is intended to be a guide and not to be slavishly followed. County Presidents have copies.
2. **Your own community needs.** Your projects for work will naturally be dictated by what is most needed in your *own* district.
3. **The need for new members.** Some of our branches are shrinking and need new life. Plan a programme that will attract *all* the women of the community — of all races, ages, creeds.
4. **Cooperation with other community organizations.** People united can accomplish a great deal more than a people divided. If you are asked to join with other clubs or societies on something of community benefit, don't be stiff-necked.
5. **Help from outside agencies.** To mention a few: the pamphlet library; the local library; films; records; radio; magazine home bureaus; Canadian and U.S. government literature.
6. **Don't forget a bit of fun.** Lay aside your Red Cross work for a few minutes at each meeting, and enjoy a bit of recreation, in the old sense of the word. You will be able to "carry on" the better for it.

Each convener will likely have a project in mind for her department, the business side of which will pass through the meeting in the form laid down in the Handbook. For instance, the branch may decide to provide milk for school lunches, through the Home Ec. convener. The business of this will be discussed at the meeting, but the actual work will be done outside. The rest of the meeting is usually devoted to something educational, and something recreational. *Do* try to get away from having long papers read at meetings. People always drift off and do their own thinking right in the middle. Short notes on various topics are better.

A "Read-Through" meeting goes well; each member brings a short poem, anecdote, or other "gem of wisdom" not more than five minutes in length, and the reading goes around the circle. A children's programme is a good way of discovering talent in the community, which the Institute might be able to help. Several of the children come into the meeting after school, to play, sing, recite, or exhibit work. The teacher's cooperation is sometimes asked. A radio-listening meeting is interesting — if you can locate a good programme at a certain time, listen in, and discuss it later.

Study-courses on subjects like "the Pre-school Child", etc., are available for groups which are interested. Films, play-readings, sing-songs; current events; gardening meetings; skill-swaps, where you teach something you know how to do in return for a skill that you want, like tatting

"FOR WANT OF A NAIL



1. MEETING-

2. CONVENER OR SECRETARY PUTS OFF REPORTING ... TOMORROW AND TOMORROW,....



3. DIRECTOR OF PUBLICITY-

4. NO REPORT IN JOURNAL LOSS OF GOOD PUBLICITY.



5. PRESIDENT - CAN'T GO - DOESN'T KNOW!

NOT A TRUE STORY, BUT A PICTURE OF WHAT COULD BE.
MORAL... SEND IN NEAT REPORTS PROMPTLY.

in return for rug-hooking; these and many more ideas can be used to good advantage in planning a lively and interesting meeting.

The best-planned meeting in the world can, however, be a total flop if the members are apathetic and interested only in the latest gossip. Be an *active* member, contribute something of yourself and your time for each meeting—and when someone inquires "What's happening in the Institute these days?" don't say, "Oh, the usual." but TELL her!

W.I. NOTES . . .

(Continued from page 23)

Emergency Fund recently inaugurated. Cherry River had a discussion on National and International Relations. An exchange of plant slips and seeds added interest to the meeting, also a contest. Belvidere Branch donated \$5. to the fund for the Blind.

Stanstead County. This is the month of annual meetings and reports have come in full of enthusiasm at the beginning of another year's work.

Ayer's Cliff is caring for two motherless children. Four new members joined recently.

Beebe gave two whist parties, proceeds to be used for school prizes and also to buy wool for soldiers' Christmas boxes. Flowers were given to their oldest institute worker, Mrs. Emma Moir, who celebrated her one hundredth birthday, Feb. 28th. This grand old lady knitted socks for the soldiers' boxes last year and is anxious to get started on this year's supply. A card and letter of congratulation were sent a charter member on her golden wedding anniversary. Members also assisted at the reception in her honour. This branch sponsors a Girl Guide group, the captain being an Institute member.

Hatley donated \$5 to their local library. A copy of the Atlantic Charter was read and discussed at their meeting.

Minton, which was temporarily disbanded, has re-organized with fresh enthusiasm and two new members were added to the roll.

North Hatley is collecting subscriptions for the "Farmer" magazine on a commission basis. Arrangements were made for collecting "Self Denial Fund".

At Stanstead North the retiring president was presented with a gift, the only member with a record of perfect attendance. A gift was also presented to the former treasurer who is leaving the community. The play, "Counter Attack," issued by the Consumer Branch, W.T.P.B., Ottawa, was put on by the members at this meeting.

During the winter months Tomifobia meets for lunch at noon followed immediately by the business meeting. With a scattered membership this arrangement proves most satisfactory during the season of short days. One new member joined at the annual meeting of Way's Mills.

Parents and Children

by Mary Avison

We hear so much about nutrition these days: protective foods, vitamins, energy foods, balanced diet, and it all sounds so simple. We decide that from now on our family must eat THIS and THAT.

But it is not so easy. All our good resolutions too often come to grief on the rock of a child's determined statement, "I don't like THIS and THAT." When our children, or even their Daddy, won't eat wheat germ, can't abide milk, or are sure that oatmeal porridge won't agree with them, what can we do to meet the dilemma of their need and their refusal? What help do the experts offer to devoted but distracted mothers?

They have several suggestions to make:— First, there are more ways than one of getting in the essentials. If milk is not popular, perhaps chocolate milk is, or even cheese. If meat is expensive or hard to get, beans, peas, peanut butter (when you can get it) or cheese again, do the job. Oatcakes instead of porridge, or shredded wheat and hot milk; instead of spinach, chard or uncooked greens (especially parsley); if chopped in a salad or sandwich they are often more popular and better than cooked vegetables.

Perhaps we housekeepers need to change our ideas for breakfast, dinner and supper and surprise our families with something different. After all it doesn't matter if our egg-a-day is eaten A.M. or P.M.; as long as we get our daily supply of vitamins, the order in which we eat them, or the form, matters little. Your family may like things better if they are not, "What we always have!"

Dietitians urge us to make food attractive, and we try our best. What is attractive to adults is not always attractive to children. A picnic on the floor, a "come and go as you please" meal with the makings of various sandwiches and drinks and a bowl of fruit, may not appeal to your desire for peace and order, but children love such informal meals, and don't do too badly balancing their own diet in the long run. Feed them thus occasionally and afterward shoo them out or upstairs and have supper à deux. It feels like a honeymoon and provides a holiday all round.

Those who are experienced in handling children add, "Make meals pleasant; avoid scolding and nagging." Nothing spoils appetite like emotional upsets. See that children are not too tired to eat. Fifteen minutes of quiet play or a story after a strenuous morning outdoors or at school may make all the difference between enjoyment and refusal. Urging a child to eat when fatigue is deadening his hunger is as useless as saying, "Go to sleep", to a restless excited child.

Use indirect suggestion. Move his glass closer rather than say, "Drink your milk, John". Be casual and don't let him know how much you care. Better still, don't care so much. Most healthy children won't starve themselves, but if

(Concluded on page 26)

The Graduating Classes of 1944



Bachelors of Science in Agriculture.



Bachelors of Science in Home Economics.

PARENTS . . .

(Continued on page 25)

they become the centre of attention by not eating, then watch out! They soon know when they are masters of the situation even if you do not, and will use their advantage. Eating should not be a duty but a privilege.

For older boys and girls who are "food problems", place the responsibility on them. Have a good chart on the wall and provide some elementary education in nutritional needs. Have a brief chat about the social difficulties of people who can't eat this and that, and then turn the problem over to them. Don't do this as a gesture, but actually do leave it to them to eat what they will of what is provided and to make their own effort, or not, to learn to like new foods. Sometimes it is possible to let them plan meals on a weekly budget, with the rest of the family adjusting to their preference for a change. After all, under rationing, we are all learning to eat new and different foods. In Britain, they are doing without many things they thought essential, and are eating much they never ate before. Perhaps they are even learning to like some of it, and certainly they appear to be thriving on it. Now may be the time for us, too, to accept changes, variety, new tastes and habits of eating, to achieve a truly balanced diet and enjoy it. Make an asset of the variety in your children's likes and dislikes. Don't be afraid to experiment with your family's appetite. Help your family to be glad we have so many foods to eat.

MACHINERY . . .

(Continued from page 7)

training in Agricultural Engineering in our colleges there is no reason why large numbers of such men should not make a good living out of serving agricultural communities in this way.

To operate a custom tillage and harvesting service of this kind involves the ownership of a shop, in which such machinery can be overhauled during the winter. Such a shop must be equipped to take care of welding operations and probably machine work. With such equipment this shop will not be useful only to the owner of the equipment used for custom work, but will become a rural repair centre for the community. It is likely, therefore, that such establishments will not long be one man units, but two men will be needed. During rush seasons in farm work such equipment can be operated day and night, involving the use of two men. It is likely also that one man will be more or less continuously employed in repair work for the community, entirely apart from the usual custom machinery service offered. It is to be hoped that those in our Provincial Departments of Agriculture will study the possibilities of this kind of service to our farming communities as it undoubtedly has sufficient promise to be worth careful investigation, and, we believe, government assistance to get it going.

Famous Huntingdon Herd is Dispersed

Gilbert McMillan's "Springburn" Ayrshire herd brought a total of \$22,130 at the dispersal sale on May 3rd. About one-third of the animals were sold to United States buyers, the remainder staying for the most part in Quebec and Ontario, though one animal goes to New Brunswick and one to Alberta.

E. A. Martin of Canton, Ohio, bought 14 head and also paid the highest price for a female, \$550.00 for Rapid

Valley Violet. Glengarry Baron Flash, the junior herd sire, brought the highest individual price at the sale, being sold for \$875.00.

Four year old cows averaged \$351.40 each; two- and three year olds averaged \$370.00; bred heifers averaged \$310.00; yearlings averaged \$243.00; heifer calves \$164.00 and bull calves \$171.00.



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NOTICE

The appraisal season for valuing farms for loans from the Canadian Farm Loan Board will begin this year on April 26th.

Applications for loans should be made to the undersigned—
P. A. Angers, Esq., Branch Manager,
Canadian Farm Loan Board, P.O. Box,
130, Station B, Quebec, P.Q.

Losses from fowl leukosis can be much reduced by brooding chicks for the first two weeks far away from the adult birds. It is important that the attendant does not walk directly from the laying house to the brooder room. The exact reason for this is not yet worked out, but these results stand out clearly from several years study at Cornell.

STRIPPINGS

by Gordon W. Geddes

When Dot told me about the marvelous efficiency of the 'football hold' for carrying babies, I decided to try it on 'Trinka's offspring when I moved them to their new quarters. However, instead of the pig looking surprised but liking it when I swung it round under my left arm, I looked surprised and didn't like it when it swung me around on my left ear. Maybe the 'football hold' is all right on a baby or for carrying a pigskin (when the pig isn't in it) but it's no good on an eight-weeks-old pig. Maybe they were old enough to be taught to put their 'arms' around my neck and hang on but that didn't appeal to me either. In the end I went back to the old method of grabbing them by one hind leg and anything else that would keep their feet off the ground and my own on it.

If the 'maiden ladies' have the same luck in offering their hand and fortune to a man as we did in offering a job and part of our fortune to several, they'll be pretty disappointed with their Leap Year opportunity. For a while we hired a new man every night and I worked alone every day. The Selective Service seemed to be too selective to put anyone at farm work. With several men loafing round the local office, it seemed as if some of them might as well be out on the farm and let the other one do the work there. With all the people that are controlling prices and labour, etc., it's a wonder there is anyone left for the farms and the Forces. And still some people want all kinds of controls carried over into peace time. We'll soon have half the employable population doing non-productive work controlling the working half. Let's do away with the controls and the restrictions which discourage employment and let more bear the burden of raising the national income.

When it came to getting local farmers to sign for a co-operative creamery, I found that they certainly were rugged individualists in many cases. They were

FAIRBANKS-MORSE

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Chores are lighter and life more comfortable today on thousands of Canadian farms, thanks to a Fairbanks-Morse Water System. There's a type — electric or engine driven — to suit every condition; easily installed, economical

and, above all, **DEPENDABLE** — the manufacturer's 113 years' experience and nation-wide organization is your guarantee of complete satisfaction.

A greater number of units will be available this year, but still not nearly enough to supply all who want them. So if you plan to enjoy running water on YOUR farm, see the Fairbanks-Morse agent, or mail the coupon, **RIGHT AWAY**.

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"Z" Engines.....	<input type="checkbox"/>	Electric Fence.....	<input type="checkbox"/>
Hammer Mills.....	<input type="checkbox"/>	Hand Pumps.....	<input type="checkbox"/>
Grain Grinders.....	<input type="checkbox"/>	Wash Machines.....	<input type="checkbox"/>
MC-1		Scales.....	<input type="checkbox"/>

Name.....

Address.....

nearly all in favour of the idea but what a variety of reasons they had to offer as to why each of them should be the last man to sign. The fact that farmers are such rugged individualists has a lot to do with the equally indisputable fact that they are such ragged individuals. And vice versa because they can't get the capital to hang together on anything unless it offers immediate cash returns.

The maternity ward down at the barn is working overtime this spring. We traded for a mare due to have a colt in April and she presented us with a mare colt. We named it Bonnie after the best mare I ever worked and are hoping that she'll live up to the name. She is a friendly little thing to date. Then the old wild cat that turned tame came across with a family of five. And every few days another cow or heifer brings us a Jersey calf and every few days there is another cow to milk. I keep hoping that nothing happens to my milking-machine with repairs to hard to get only my milking-machine happens to be my two hands with no spare parts available, though that is another post-war possibility according to some reports. Meanwhile, it is encouraging to read that the farm labour shortage will be much less acute this summer though it would be more convincing to have some source sign, seal and deliver a man or boy that would stay at least long enough to know his way around the barn. The price of dairy cattle in Ontario sounds as if they expected to have help up there. I wish they'd either send down a buyer from there for some of our cows or a man to help milk them.


We are not quite up to last year's figures on maple production to say nothing of a 31% increase. We did our part with a 25% increase in the number of buckets put out. When our man departed before the tapping was even finished, we also made a 25% increase in working hours. However, the weather man hasn't been any more helpful than the Selective Service. We

might make syrup without help but we can't make it without sap. It has stayed cold too steadily and then will probably be warm too steadily. However, it is time for it to be steadily warm soon if we are to meet quotas on other food crops for we can't live on maple syrup alone.

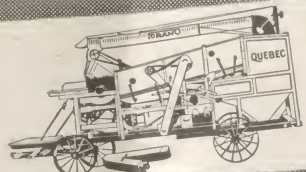
Studies from many agricultural research stations have shown that improvement of pastures definitely pays by cutting cost of milk production. The use of commercial fertilizer is widely accepted as desirable. A clear-cut study from Pennsylvania State College shows highest net returns per acre from the use of phosphate and potash. It is wise to consult a specialist before deciding on a treatment for your own particular pasture.

FORANO

The stationary Gasoline Engine is gradually regaining the confidence of the farmers because time has proved that slow speed stationary engines last a lifetime without trouble. The Forano is an old timer still on the job.

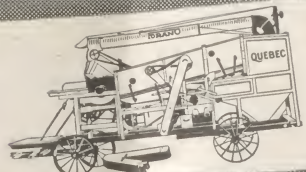


MOTOR

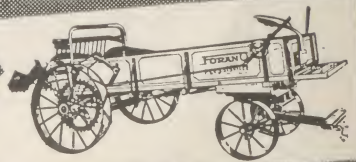


THRESHER

The Forano-Quebec Thresher is a well known machine, long appreciated for its simplicity, performance and low price; characterized by a patented screen made in two inversely operating parts—the only machine of its kind.

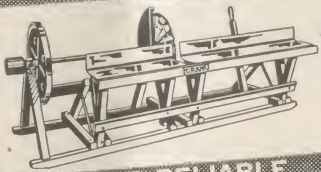


FARM




SPREADER

The Forano light weight and light draft Manure Spreader, with a capacity of 40 to 45 bushels, has a wide reputation for its performance with two medium weight horses. Maintenance cost is very low with a Forano Spreader.




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Buy a Forano Cordwood Saw Frame. It is simple — heavy — well made and will last a lifetime.

The Forano All-Steel Thresher is our pride. Customers like it for three reasons: Firstly, for its particularly good performance, quality and quantity; secondly, because it is a well built machine; thirdly, because it has a good appearance.



ROOT CUTTER



THRESHER

Forano Root Cutter can be driven by hand or motor. It is roller bearing mounted, rendering it easy to operate.

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Pithy Pickings

The consuming public of various city areas were gratified to find choice raspberries, strawberries, peaches, new peas, and asparagus available during our months of dullest menu — just the time when the housewife is tempted to part with a premium price. These commodities had been processed by the "Quick-freeze" method which can give a more desirable product from the point of flavour and appearance than any other method of preservation. This process involves grading, packaging, and very rapid freezing followed by storage at 32°F. or lower. Vegetables are first blanched to minimize loss of vitamins and flavour deterioration. Other fruits and vegetables than those mentioned are suitable for the process.

* * *

As Professor Maw mentioned in the "Journal" last month much study is being undertaken to make greater use of grass in the poultry ration. A four year study at Cornell University has shown that an average saving in feed of 13% was obtained by giving growing access to good pasture. This saving was brought about without any change in time of sexual maturity, or of egg production, or of gain of weight. The plan involves careful control of the pasture to keep much of the grass in young, succulent condition, and careful control of the amount of grain and mash made available. Green grass is well supplied with most of the vitamins, and has more of these than any other feed. Mineral content is good and protein content may be as high as 30%. As well as saving feed the use of grass can also permit use of rations containing little or none of some of the vitamin supplements which tend to be in short supply and expensive.

These are the costs to the Canadian farmer of unfairly low prices; costs which have piled up for a long time in many instances and which many farmers cannot stand much longer:—

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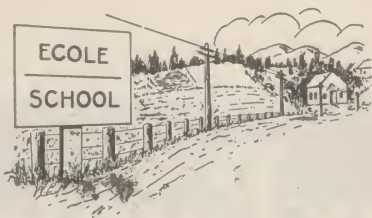
HERD SIRE — PARKDALE ROYAL LAD
C. J. BRYSON

(REG.) C.B.R.

ORMSTOWN, QUE.

1. He pays himself no wages.
2. He is forced to deplete his soil fertility.
3. He works longer hours than in any other industry.
4. He endures a lower standard of living.
5. He and his family are forced to get along without modern conveniences. A number of writers have recently pointed out conditions akin to this.

A new piece of equipment for grading maple syrup called a colorimeter has been distributed by the Wartime Prices and Trade Board. The method of grading depends on matching a particular syrup sample with one of a number of standard color solutions in the equipment. Producers may obtain these colorimeters from O. Robitaille, Distribution Manager, Wartime Prices and Trade Board, 490 Sussex Street, Ottawa.



LIVING AND LEARNING



Forum Council Guest of Co-operative Fédérée ANNUAL MEETING TO BE HELD JUNE 10 AT COLLEGE

Combining a review of the Farm Forum year and plans for the annual meeting with a visit to the offices of the Co-operative Fédérée, fifteen members of the Quebec Council of Farm Forums met in Montreal on April 15th.

H. C. Bois, general-manager of the Fédérée, H. Brabant of the Feeds Department and B. Bourgaud in charge of Seeds and Fertilizer addressed the Council at its morning session, giving much information of interest to the members. Good discussion followed each speaker. "As a true co-operative, the Fédérée is indifferent to political and religious issues", said Mr. Bois in answer to a question. "Our aim is to try to help one another to have a better living."

Features of the business meeting included a report of the organization of a district meeting in Chateaugay-Huntingdon. The council decided to assist this type of organization by contributing dollar for dollar with the forums for expenses—the limit of the council's contribution being one dollar for each forum in a bona fide district.

The date for the annual meeting was set for June 10th, at Macdonald College. Speakers to be invited include Dr. W. H. Brittain, H. H. Hannam and W. J. Parker of Winnipeg, who is vice-president of the Canadian Federation of Agriculture and represents farmers on the board of the Canadian Broadcasting Corporation.

Brittain and H. H. Hannam.

A nominating committee consisting of Mrs. Chas. Drummond, N. L. Cameron and Alan Crutchfield, was appointed to bring in a slate of nominations to the annual meeting. All farm forum members at the annual meeting have the right to vote on all matters brought before that meeting.

The following members were present at the council: Stuart Armstrong, Lachute; Claude Witcher, Foster; J. D. Harrison, Bury; Alan Crutchfield, Huntingdon; William Frank, Kingsbury; Mrs. Donald MacElrea and N. L. Cameron, Lennoxville; Reg. Connor, North Hatley; Mrs. Charles Drummond, Sherbrooke; S. W. MacKechnie, Quyon; Murray Mason, Cowansville; George Collum, Ormstown; P. D. MacArthur, Howick; and R. Alex Sim, Prof. J. E. Lattimer and H. Avison, Macdonald College.

Rural Circuit Notes

When people in the city want to see a motion picture they get on a street car or walk to the nearest theatre. Sitting on soft-cushioned seats in an air-conditioned theatre they see the show and return home with a minimum of effort.

Showing films in rural centres is not as easy. First you must have electricity—or an expensive and cumbersome transformer. Then, there is the weather—and the roads. A projector is a necessity; so are films. A projector is expensive—when you can get one. A rural community seldom has a suitable auditorium. The air conditioning, especially in winter is often of the uncomfortably frigid sort. Chairs or benches must be arranged. These scrape and squeak when complete silence would add to the effect of the film. The room is probably not tested or constructed for its acoustical qualities. Consequently films that were perfectly prepared have distorted sound.

Yet in spite of these hurdles, the rural film audiences either clear them or ignore them. They are enthusiastic about the Rural Film Circuits which the Adult Education Service administers for the National Film Board.

Here's a report from Rev. J. R. Wheeler on Easter showings at Fitch Bay, Tomfobia and Georgeville. Mr. Wheeler is the volunteer projectionist, who arranges showings in these three places.

"The attendance and interest are increasing at Fitch Bay. There was favourable comment on the films. I heard

Camp Macdonald

Camp Macdonald, a school of community programs, will hold its fourth annual session at Cedar Lodge, Lake Memphremagog, August 19 to September 4. Two sessions, the first on group work methods beginning August 19, the second beginning August 26, on Community Organizations methods will comprise the school program. While Camp Macdonald is intended primarily for Farm Forum, Community School and Film Circuit leaders in Quebec, students, from other provinces and the United States are expected, whose community interest is in libraries, social agencies, and the church. Many French speaking students are expected. Eugene Bussiere, and J. C. Falardeau of the Faculty of Social Science of Laval University will be on the staff. Other staff members are Dr. W. C. Hallenbeck, Teachers College, Columbia University, Dr. Fern Long of the Cleveland Public Libraries, Joyce Tyrell of McGill School of Physical Education, Dr. Lois Fahs Timmins of New York, R. Alex Sim and others to be announced later.

the farmers discussing the farm film informally while reels were being changed.

The young people at Georgeville have only recently organized and are now sponsoring the film showings. They expect to make the films part of their program each month.

Our roads are at their worst. I transported the equipment in the buggy where it occupied the room my feet should have had, so they roosted on the sides.

The projector was used for religious films on Easter Sunday. I went part way with buggy and then changed to a sleigh. In order to use the films at all three places I had to show twice in the daytime. That worked all right at Tomifobia as we used a house. (There is no electricity in the church.) The showing at Fitch Bay was not so easy, but we darkened the windows with building paper. It had been tarred and so scented the church with what was taken at first to be moth balls that we finally darkened the windows with carriage blankets. And while other

churches celebrated with flowers, we celebrated with pictures."

There was a special film showing at Gracefield, where over 300 farmers, French and English, met to see the film "The People's Bank" and then had a discussion on credit unions. Shawville had a special speaker and an extra large attendance. At Brompton Road and Kingsbury, the film showings are used in conjunction with young people's meetings. Shawbridge features musical and instrumental numbers before the films.

A number of schools notably New Glasgow, Wakefield and Kazabazua, take advantage of Bob Taylor's monthly visit to show films from the Quebec Department of Education.

There is quite an interest in Victory Gardens, and the showing of special films has resulted in orders for pamphlets, and plans for garden contests.

U.S. FILMS FOR FARMERS

There seems to be some disagreement among authorities in Canada as to the value of films for educational purposes — at least in the field of agriculture. However, the United States Department of Agriculture appears to entertain no such doubts, as indicated by the following short report by C. A. Lindstron, Associate Chief of the Motion Picture Service in the February, "List of Publications" published by that Department. It says:

"Motion pictures have been used by the U.S. Department of Agriculture since 1913 as an aid in its educational, administrative, and regulatory work. It was Secretary "Tama Jim" Wilson who recognized that with the motion picture he could demonstrate to thousands how to grow hogs or handle the poultry flock where it had been possible to reach but tens, and at but a fraction of the cost. Since his time the motion picture has been used, not only to demonstrate, but to inform and guide the farm people of the country on subjects having to do with the conduct of their operations, the control of insects and disease, care of livestock, propagation of plants, conservation, forestry, road building, soils, and weather. The home was not neglected. Care of home and children, the farmstead, clothing were all subjects of Department motion pictures.

"Since the start of this war, the Department motion picture program has been geared largely to assist the farmer in solving the problems brought on by the necessity for conversion from the crops of peace to unprecedented production of food and oil and fibre crops required for total war. Certain movies have been designed to build and maintain morale among the hard-pressed farm people and, in the interest of harmony and cooperation, to give others an appreciation of what the farmers are doing to help win the war. Certain films have been of the "how to do it" type; others have presented problems for consideration."

MAKE IT AT HOME

The Macdonald College Handicraft Division has recently begun the publication of a series of handicraft pamphlets. Each pamphlet is devoted to a single craft project as *How to Weave on the Inkle Loom*, *How to Make Leather Slippers*, etc. Any of the projects can be done on the school desk or the table at home. No previous training is needed to learn from these pamphlets, for they are self-instruction pamphlets.

These pamphlets tell how to make most of your own equipment (chip carving chisels); explain with drawings all necessary techniques (sewing leather slippers); show how to use equipment (inkle loom weaving); give you directions for making several practical articles (thonged belts); and suggestions as to how to make many more.

The pamphlets were written by people who know their crafts and can write in an interesting manner about them.

Each pamphlet costs 10c.

As part of the Handicraft Project, a supply center has been established at the College where all tools and materials needed to make things described in the pamphlets may be purchased in kit form or separately.

Five pamphlets have been published to date:

1. Leather Belts That You can Make.
2. How You can Make the Inkle Loom and Weave with It.
3. Leather Slippers that You can Make.
4. Chip Carving.
5. Small Animal Sculpturing.

Other pamphlets for publication include:

Linoleum Block Printing,	Rug Hooking
Fish Fly Tying,	Honeycomb Weaving
Horn Craft,	Making Gloves and Mittens
Embroidery and Needlecraft,	String Knotting
Whittling, Card Weaving	Polishing Stones



THE COLLEGE PAGE

Dr. W. S. Blair Retires

Secretary-Treasurer of the Nova Scotia Farmers' Association since 1939 — Director at Kentville Experimental Farm for 25 years.



Many old friends of Dr. W. S. Blair will learn with interest that he has retired from his position of Secretary-Treasurer of the Nova Scotia Farmers' Association — a position which he has held since relinquishing the post of Director of the Dominion Government Ex-

perimental Station at Kentville, N.S., a number of years ago — a position which he occupied with distinction for over a quarter of a century. In paying tribute to the work of Dr. Blair in the Association, the President, Mr. Archibald Cox of Princeport, said:

"Though Dr. Blair has given a lifetime to agricultural pursuits, it can be truly said that his work has not petered out. Just the reverse. He retires from the Farmers' Association with his work at its zenith and with the realization of an ambition well in sight.

"He believed in an organization that would raise the status of Nova Scotia farmers. He planned for such an organization. And what is more he worked for such an organization. Today he sees the foundation of a reorganized Nova Scotia Farmers' Association well and truly laid. And as he views the rising structure, he has every right to take a deal of satisfaction, for it is very largely his production".

First Professor of Horticulture at Macdonald

The old guard at Macdonald College have lively memories of the energy and efficiency with which Dr. Blair carried out his duties as the first Professor of Horticulture at this institution. These duties involved the landscaping of the college grounds, a task that has excited the admiration of visitors from far and near. Had Dr. Blair never

done anything else, this would have been a fitting monument and it is gratifying to his many former students and friends to know that his later efforts on behalf of his native province have received such well-merited recognition.

It was on Nov. 4th, 1905 that William Saxby Blair first set foot on Macdonald College property. He was engaged by Dr. J. W. Robertson to direct the horticultural development work. He had already had seventeen years experience on the Experimental Farm at Nappan, N.S. At that time, only the foundations of the five main buildings were constructed.

When class-room work with students was started in 1907 he carried on the instructional work. Both the 1911 and 1912 graduating agricultural classes received horticultural instruction under his direction. When the first classes started the field laboratory was sufficiently advanced to furnish needed material for class-room work, and an effort was made to retain as many students as possible for summer work in the horticultural department.

Went to Kentville in 1912

In the spring of 1912 he was asked to take charge of the Experimental Station at Kentville, N.S., His fondness for development work drew him away from the college and in June of that year he went to Kentville. There the most of the land areas suitable for fruit were still in woods. Before retiring in 1938, after 36 years as a classified Dominion servant in the Dominion Department of Agriculture and in addition several years as labourer in that department, he had the satisfaction of planting an orchard of some 15 acres at Nappan, one at Macdonald College and one at Kentville, and from the latter of harvesting in one year near to 7000 barrels of fruit.

In 1930 the Board of Governors of Acadia University, Wolfville, N.S. conferred on him the honorary degree of Doctor of Science in recognition of his efforts in aid of agriculture. In January 1939 he was asked to be Secretary-Treasurer of the Nova Scotia Farmers' Association which work he has carried on until resigning on March 21st, 1944. He was born at Onslow Colchester County, N.S. in 1873. His father Lieut-Col. W. M. Blair was Superintendent of the Experimental Farm, Nappan, N.S. from 1888 to 1897.

The Russians are now using fumes from onions as an effective disinfectant in the treatment of wounds and mouth infections.

* * *

Remember, now that the warm weather is coming, that the few bacteria in your milk utensils that your "sterilizing" failed to kill won't take long to eat a hole in your milk cheque.

* * *

We had better know that the system of free enterprise is on trial. In the 19th century, it survived storms and crashes . . . because it was the only possible system. Those days are over . . . The free economy must stabilize the business cycle, without gross poverty and gross speculative riches . . . must provide reasonably stable markets and acceptable prices for farmer . . . must satisfy the sense of justice among the people . . . must act voluntarily and wisely in the public interest.

We cannot seriously expect that the free enterprise system will survive another collapse of world commerce, and another great depression in which millions are unemployed, banks are closed, farmers are prostrate, careers, fortunes and men's hopes are blighted.

These calamities are not unavoidable under a free economy. But . . . they can be amended only if the business world is led by its industrial statesmen, who realize that they can only preserve the old system by new knowledge, new methods and new policies. A. Lipmann.

Buy

War Savings Stamps

Regularly

SPEED-UP SEEDING WITH THE RIGHT FUELS AND LUBRICANTS



Food will play a decisive part in winning the war. To supply essential cereals, root crops, hogs, beef, fruits and other farm produce for vastly increased wartime needs Canadian tractors and other farm equipment must have constant care—they have to work as they never worked before.

This makes you an essential war worker. And the same goes for the Imperial Oil agent who brings to your door the correct quality fuel and lubricants for your particular needs. Your work—plus your farm and equipment—plus your Imperial Oil agent—plus dependable Imperial products—make a winning combination.

Esso Extra
3-Star Gasoline
Acto Gasoline
Tractor Distillate
Diesel Fuel
Marvelube
Motor Oils
Gear Oils and
Greases
Imperial Essolube
H.D. Motor Oil



IMPERIAL OIL LIMITED

KEEP FARM MACHINES IN FIGHTING TRIM—LUBRICATE WITH MARVELUBE



THE WARTIME PRICES AND TRADE BOARD

FARMERS' BULLETIN

SUBSIDY ON IMPORTED BEES

To help farmers increase honey production, a subsidy of 50 cents a pound will be paid from March 1 to June 15, 1944, on all importations of live packaged bees from the United States. The subsidy will be paid by the Commodity Prices Stabilization Corporation to dealers or to persons dealing with a non-resident supplier and importing bees for their own use or for sale.

With the increased demand for bees, the new subsidy policy will help to meet higher costs of stocks in the United States.

Applicants for the subsidy must fill in a special form and mail two copies to Commodity Prices Stabilization Corporation within 90 days of receipt of the imported bees. Copies of the form may be obtained from provincial beekeepers' associations, Regional Offices of the Wartime Prices and Trade Board or provincial apiarists.

RATIONING OF FARM MACHINERY

Rationing of farm machinery is still necessary because of shortages of materials and component parts, particularly steel sheets, ball and roller bearings, motors and malleable and grey iron castings. There is no rationing of repair parts, which are being produced at 156 per cent of normal output, and farmers are urged to make every effort to keep their present equipment in operation.

Under Wartime Prices and Trade Board regulations, farmers who sell used equipment will not be entitled to buy similar new machinery unless they have first filed with the Board's representative a full description of machinery sold and reasons for selling, together with a full description of new machinery wanted and the need for it. They must also have a notice of approval from the Board's representative before their application for new machinery will be considered.

Applications will be accepted only from farmers who actually own or lease the land on which the machinery is to be used.

CEILING PRICES FOR MUTTON

Maximum wholesale and retail prices for mutton in all areas are fixed in a Board order now in effect. Mutton is defined as distinct from lamb to protect buyers from misrepresentation.

Mutton prices have been established in proper relationship in point of value to lamb prices. Following are maximum wholesale prices for mutton carcasses in the various zones, which are defined roughly:

ZONE

1—Rural Maritimes, Gaspé, Lake St. John area.....	.19c
2—Maritime Cities .....	.18½c
3—Rural Quebec .....	.18½c
4—Montreal, Quebec City .....	.17¾c

ZONE

5—Eastern Ontario .....	.18¼c
6—Southern Ontario .....	.18c
7—Northern Ontario .....	.18¼c
8—Northern Ontario Cities .....	.17¾c
9—Northwestern Ontario .....	.17¼c
10—Manitoba .....	.16½c
11—Saskatchewan .....	.16¼c
12—Alberta .....	.16c
13—Rural British Columbia .....	.17¼c
14—British Columbia Cities .....	.17c
15—Vancouver Island .....	.17½c

POTATO STORAGE CHARGES

Order No. 929 Now in Effect.

This order setting the ceiling prices for table stock potatoes provides that storage charges may be added to the ceiling prices in each zone in certain designated periods. Total storage charges which may be added for the period up to April 30, 1944, are 30 cents per 75-lb. bag; 40 cents per 100-lb. bag.

CEILING ON USED TRUCKS

Private sales of used trucks and trailers are placed under a price ceiling by a new order of the Motor Vehicle Controller. The order also applies to trucks and trailers sold by auction or in sales of personal or household effects.

NO RESTRICTIONS ON MEAT STORAGE

Farmers who are in the habit of storing meat in cold storage lockers during the summer, may continue to do so while meat rationing is suspended. If rationing is resumed, such meat will be subject to regulations as imposed.

ORDER SEED EARLY

Although special efforts have been made to ensure sufficient supplies of seed to meet planting requirements, farmers and gardeners are advised to order all varieties of forage, grass and vegetable seed as early as possible.

SUGAR FOR CANNING

Five pounds of sugar per person may be purchased for home canning on May 25 by using "F" coupons (Nos. 1 to 5) in Ration Book No. 3. Each coupon is good for one pound of canning sugar. Another five "F" coupons (Nos. 6 to 10) become valid on July 6. The canning sugar supplies, which will total 10 pounds per person for the year, will be over and above the regular sugar ration.

If canning sugar is not wanted, the "F" coupons, after they become valid, may be exchanged for preserves coupons at Local Ration Board Offices and used for the purchase of manufactured preserves.

For further details of any of the above orders apply to the nearest office of the Wartime Prices and Trade Board